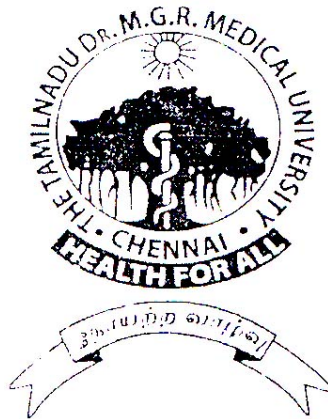


**“A STUDY TO ASSESS THE EFFECTIVENESS OF PARTICIPATION OF  
PATIENT’S ATTENDANTS IN CARE, ON THEIR ABILITY IN MEETING  
SELECTED NEEDS OF PATIENTS WITH CEREBROVASCULAR  
ACCIDENT IN A SELECTED HOSPITAL IN MANJERI AT KERALA ”**

**M.Sc. (NURSING) DEGREE EXAMINATION  
BRANCH I - MEDICAL SURGICAL NURSING**

**R.V.S. COLLEGE OF NURSING  
SULUR, COIMBATORE**



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**A study to assess the effectiveness of participation of patient's attendants in  
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**“A Study to Assess the Effectiveness of Participation of Patient’s Attendants in Care, on Their Ability in Meeting Selected Needs of the Patients with CerebroVascular Accident in a Selected Hospital in Manjeri at Kerala”.**

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## **ABSTRACT**

**“A study to assess the effectiveness of participation of patient’s attendants in care on their ability in meeting the selected needs of patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala.”**

The aim of the study was to evaluate whether participation of patient attendants in care of patients with Cerebrovascular Accident made any difference in the ability of patient’s attendant’s in providing care for patients with Cerebrovascular Accident compared to those who did not participate in care.

The Conceptual framework followed is nursing process model based on Dorothy E. Johnson's Behavior System Model of Nursing (1980). A quasi experimental pretest post test control group design was used to evaluate the effectiveness of participation of patient attendants in care of patient with Cerebrovascular Accident on their ability in providing care for those patients. The sample consisted of 40 attendants (control group-20, experimental group-20) who were selected from the population based on the sampling criteria using convenient sampling technique.

The data from the samples were collected by using a structured interview schedule and observational checklists. A pre test was conducted in experimental and the control group by assessing their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding, assisting in elimination) using a checklist. In the experimental group, the technique of meeting selected care needs (oral care, bed bath and back massage, tube feeding, assisting in elimination) were demonstrated by the investigator, on the first day after the pretest and the next 2 days they all participated in the care along with the investigator and corrections and encouragement were given during their participation. After 1 week post test was conducted. No intervention was given for the control group after pre test, and subsequent observation was done after 1 week. The caregivers in the control group were also taught and allowed to clarify their doubts after the data collection for their benefits.

Significant mean score difference was seen in the level of ability in providing care between the experimental and control group. Significant difference is seen in all the four aspects of care. There was a significant improvement in the ability to provide

oral care ( $t=35.155$   $df=38$   $P=0.05$ ), bed bath and back massage ( $t=45.78$   $df=38$   $P=0.05$ ) tube feeding ( $t=58.99$   $df=38$   $P=0.05$ ) and the ability in assisting in elimination ( $t=30.02$   $df=38$   $P=0.05$ ) in the experimental group compared to the control group after the intervention

The results showed that experimental group had a significant increase in the overall ability in providing care (pre  $M=22.10$  and post  $M=57.80$ ) ( $t=60.23$   $df=38$   $p=0.05$ ) after intervention. But there was no significant change in the mean ability score among the control group.

The findings of the study conclude that the participation of patient attendants in care of patients with Cerebrovascular Accident had an effect on their ability in providing care to those patients. It improves their ability in providing care and ensures the safety of the patients and minimizes the risk of complications.

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# INTRODUCTION

# **CHAPTER – I**

## **INTRODUCTION**

### **BACKGROUND OF THE STUDY**

**"A wise man ought to realize that health is his most valuable possession and learn to treat his illnesses by his own judgement"**

**HIPPOCRATES**

Health is one's greatest wealth which is the roof to all his treasures. Health allows us to live full lives and to function as social beings; but illness disrupts our lives, sometimes seriously. Health not only has an impact on the individuals but also upon the society as a whole.

Illness or disease is a state of poor health. Chronic diseases are diseases of long duration and generally of slow progression. Most chronic diseases do not resolve spontaneously and are generally not cured completely. Some can be immediately life-threatening, such as heart attack and stroke. Chronic diseases, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality in the world, representing 63% of all deaths. Out of the 36 million people who died from chronic disease in 2008, nine million were under the age group 60 and 90% of these premature deaths occurred in low and middle income countries. Having a long-term or chronic illness can disrupt your life in many ways.

A chronic disease often requires extensive care by a healthcare provider with the cooperation of the patient in learning and practicing methods of rehabilitation. While healthcare providers offer different courses of treatment to lessen the effects of symptoms caused by chronic disease, most chronic illness cannot be cured completely. Frequently the result is a lifetime of discomfort, doctor's visits, medical tests, medications, therapies and sometimes surgeries.

Some patients may become disabled or depressed due to enduring lengthy or recurring bouts of illness. Because of these factors, patients suffering from chronic disease may require long term care by the care providers to improve overall well being.

Stroke is the first cause of acquired disability in the world. It is the third leading cause of death in United States. According to WHO (2010), 15 million people suffer stroke worldwide each year, of these 5 million die and another 5 million are permanently disabled. High BP contributes to over 12.7 million strokes worldwide. The overall stroke remains high due to aging population.

Cerebrovascular accident can cause various degrees of brain damage that may lead to different levels of physical, cognitive and speech impairment. Such disability affects the daily living and self-care of cerebrovascular accident patients. Applying the appropriate care is of utmost importance in helping the cerebrovascular accident patient to cope with these disabilities and to improve their quality of life. Once a person gets a disease he may seek the treatment in right time, get cured and become independent. But in case of cerebrovascular accident which makes the patient dependent on others throughout the life time for his personal activities. Such patients are more stressful, feeling helpless, and depressed.

Family caregivers and friends play a critical role in a loved one's recovery from cerebrovascular accident, particularly as time spent in hospitals and rehabilitation facilities continues to decrease. Cerebrovascular accident recovery lasts for at least two years after stroke onset, so most of the support during this period comes from informal sources including friends and family members. Most patients have families that are providing some level of care and support. In the case of older adults and people with chronic disabilities of all ages, this "informal care" can be substantial in scope, intensity, and duration.

Family care giving raises safety issues in two ways that should concern nurses in all settings. First, caregivers are sometimes referred to as "secondary patients," who need and deserve protection and guidance, because their care giving demands place them at high risk for injury and adverse events. Second, family caregivers are unpaid providers who often need help to learn how to become competent, safe volunteer workers who can better protect their family members (i.e., the care recipients) from harm.

Providing care for a cerebrovascular accident patient can be an extremely rewarding experience. At the same time, it can be very stressful and frustrating to be

suddenly thrust into the position of caregiver with little or no warning. Due to inadequate knowledge and skill, family caregivers may be unfamiliar with the type of care they must provide or the amount of care needed. It is also important to note that stress tends to increase over time if the caregiver's needs are not met. Some of those needs may include the need for information, the need for skills in the physical aspects of care, and the need for support in the "case management" aspects of care.

There are currently over one million stroke survivors in the United States requiring assistance with daily tasks (Centers for Disease Control [CDC], 2001). Stroke is one of the major causes of long term disability (National stroke association 2005). Estimated number of non institutionalized people with stroke steadily increased between 1970s and early 1990s from 1.5 million to 2.4 million. The high incidence and high prevalence of stroke have a major impact on society.

After initial hospitalization and stroke rehabilitation 80% of stroke survivors return to the community, relying on their family members emotional, informational, and instrumental support for daily living (Anderson C, Linto J & Stewart-Wynne EG, 1995). This steady increase in the non institutionalized stroke survivors has greatly affected the care givers of persons with cerebrovascular accident and their role in day to day care of persons with cerebrovascular accident. Cerebrovascular accident caregivers have to deal with not only cerebrovascular accident patients' difficulties in mobility, self-care, and communication, but also their cognitive impairment, depression, and personality changes (Kelly & Winograd CH, 1985).

Advancing age and anxiety in patients and caregivers, high dependency, and poor family support identify caregivers at risk of adverse outcomes, which may be reduced by caregiver training (Mc Cullagh E, Brigstocke G, 2005). Protecting the caregiver from harm as well as protecting the care recipient from an ill-prepared family caregiver are important.

For centuries, family members have provided care and support to each other during the time of illness. Family caregivers often feel unprepared to provide care, have inadequate knowledge to deliver proper care, and receive little guidance from the formal health care providers. (Schumacher KL, Stewart BJ, & Archbold PG, et al.,

2000) Caregivers need adequate resources to assure minimization of risk to the patient.

More case management programs may be useful to help ease the transition from hospital to home which promotes safe and effective hospital discharges, and support caregivers in their ongoing, post hospital care. Nurses, preferably those trained, have a key role in case management (Hallberg IR & Kristensson J., 2004).

## **NEED FOR THE STUDY**

A "disability" is a difficulty of doing something that is a normal part of our daily life.

People who have had a cerebrovascular accident may have trouble with many activities that were easy before, such as walking, talking, and taking care of "activities of daily living" (ADLs). These include basic tasks such as bathing, dressing, eating, and using the toilet, as well as more complex tasks called "instrumental activities of daily living" (IADLs), such as housekeeping, using the telephone, driving, and writing cheques. Some disabilities may be obvious after the cerebrovascular accident. Others may not be noticed until the person is back home and is trying to do something for the first time since the cerebrovascular accident. Because of the disabilities they may be dependent on others for meeting their daily needs. Family members are participating in the care of patient in both hospital and home settings.

Caregivers who help cerebrovascular accident survivors at home are usually family members such as a husband or wife or an adult son or daughter. They may also be friends or even professional home health aides. Usually, one person is the main caregiver, while others help from time to time. Caregivers getting involved in the care are a good aspect of patient care but when they are involved they should be properly trained and educated. But in many settings the caregivers are providing care to the patient without proper understanding about it. Researcher also observed the faulty feeding techniques of the caregivers while she was working in the neuro-medical department. Even though no complications are reported so far, the patients are at high risk for getting complications.



When the patient is in the hospital the nurse is there to provide care for the patient. After getting discharged usually it is the responsibility of public health nurse to do the follow up care because cerebrovascular accident patients need long term care. Unfortunately in our setup that system is not working properly. Once they get discharged from the hospital the family members are supposed to help the patient to meet the patient's needs. When patient attendants are not provided with adequate information about the patient care in order to give care at home and to prevent the development of complications they naturally feel ill-equipped and are not confident about the care of the patient. In addition to this, patients affected by cerebrovascular accident may be discharged along with Ryle's tube feeding or urinary catheters etc. which may be difficult to handle for the persons who are not trained to handle those equipments. So it is an important part of discharge planning to make sure that caregivers understand the safety, physical, and emotional needs of the cerebrovascular accident survivor, and that they will be available to provide needed care. Thus the need for education is very important for the patient attendants. It is most appropriate to involve the attendants in giving care of the patients with cerebrovascular accident to improve the quality of life of the patients and to prevent complications. It is the responsibility of the nurse to educate the family members regarding the care. Though a variety of rehabilitation and educational programs are available for both the patients and care givers, participation of the patient attendants in care will definitely help to improve their ability in providing care for patients with cerebrovascular accident and will ensure safety of the patients.

## **STATEMENT OF THE PROBLEM**

Effectiveness of participation of patient's attendants in care on their ability in meeting selected care needs of patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala.

## **AIM OF THE STUDY**

Aim of the study is to assess whether the participation of patient attendants in care of patients with cerebrovascular accident improve their level of ability in meeting the needs of the patients with cerebro vascular accident compared to the attendants who do not participate in care.

## **SPECIFIC OBJECTIVES**

- To assess and compare the level of ability of experimental & control group in meeting the selected care needs of patients with cerebrovascular accident before intervention (oral care ,bed bath & back massage, Ryle's tube feeding & assisting in elimination) .
- To assess and compare the level of ability of experimental & control group in meeting selected care needs after intervention (oral care ,bed bath & back massage, Ryle's tube feeding & elimination).
- To associate the selected demographic variables (age, education, occupation and relationship with the patient) and the overall level of ability of attendants in meeting selected care needs of CVA patients before intervention .

## **HYPOTHESIS**

**H1 :** There is a significant difference between the mean ability score of experimental & control group in meeting selected care needs (oral care ,bed bath & back care, Ryle's tube feeding & elimination) of the patients with cerebrovascular accident after the intervention.

**H01 :** There is no significant difference between the mean ability score of experimental & control group in meeting selected care needs (oral care ,bed bath & back care, tube feeding & elimination) of the patients with cerebrovascular accident before intervention.

## **OPERATIONAL DEFINITION**

a) **Effectiveness :**

In this study effectiveness refers to the improvement in the ability of patient's attendants in meeting selected needs of the CVA patient after intervention.

b) **Participation :**

Participation refers to the action of taking part by the attendants in selected patient care activities along with the nurse.

c) **Patient's attendant:**

Patient's attendant refers to those persons who are staying with the patient most of the time and will be involving in patient care at home.

d) **Ability :**

In this study ability refers to skill in providing care to the patients with cerebrovascular accident.

e) **Selected needs:**

In this study selected needs refers to the activities which are essential for health but the patient cannot carry out these activities that include care in the areas of oral care, bed bath and back massage, nutritional and elimination needs.

f) **Cerebro vascular accident:**

It is the rapidly developing loss of brain function resulting from disturbance in the blood supply to the brain due to blockage in the blood vessels or bleeding from the vessel, resulting in paralysis & loss of functional ability that make the individual fully or partially dependent on the care givers for meeting the needs.

## **ASSUMPTIONS**

- Cerebrovascular accident affect a person's ability to meet his personal needs .
  - The recovery and rehabilitation process following cerebrovascular accident may be prolonged.
  - The person affected by Cerebovascular accident become completely or partially dependent on others in meeting his basic needs .
- Knowledge & competence can be improved through care giver education and support.

## **LIMITATIONS**

- As the sample size is small and not representative the results cannot be generalized.

- Follow up assessment after discharge could not be carried out because the study period was short.

## **DELIMITATIONS**

The study is delimited to,

- Patients in one selected hospital.
- Patient attendants in the age group of 20-60yrs.
- All the needs of the patients are not focused, only selected care needs are focused.

## **SCOPE OF STUDY**

Through this study the researcher can determine the ability of the patient attendants in meeting the selected care needs of patients with CVA by observing their performance. So the areas where there is a lack of skill can be focused. The understanding about the proper technique of meeting the needs in the areas of oral care, bed bath & back massage, assisting in feeding & assisting in elimination, will help them to provide care using the correct technique, avoid potential complications, promote patient safety & reduce the care giver burden.

The study findings will help the health care provider to provide adequate training to the attendants of the patients in the areas of oral care, bed bath & back massage, assisting in feeding & assisting in elimination, in order to prepare the attendants to provide care to the patient both in the hospital as well as in the home setting.

## **CONCEPTUAL FRAMEWORK**

A theory is a set of interrelated concepts, adapted for a scientific purpose, definitions and propositions that present a systematic view of phenomena by specifying relations among variables with the purpose of explaining and predicting the phenomena (Kerlinger 1986).

A frame work is the building block of a theory, describing mental image of a phenomena which can be abstract or concrete.

Conceptual frame work refers to interrelated concepts or abstractions that are assembled together in some rational scheme by virtue of their relevance to a common theme (Polit & Hungler - 1997)

In this study the Conceptual framework is nursing process model based on **Dorothy E. Johnson's** Behavior System Model of Nursing (1980). The study focuses on assessing the effectiveness of participation of patient attendants in care on their ability in meeting selected care needs of patients with cerebrovascular accident.

Johnson defines a system as a whole that functions as a whole by virtue of the interdependence of its parts. Individuals strive to maintain stability and balance in these parts through adjustments and adaptations to the forces that impinge on them. A behavioral system is patterned, repetitive, and purposeful.

Johnson's key concepts describe the individual as a behavioral system composed of seven subsystems:

1. The **attachment-affiliative** subsystem provides survival and security. Its consequences are social inclusion, intimacy, and the formation and maintenance of a strong social bond.
2. The **dependency** subsystem promotes helping behavior that calls for a nurturing response. Its consequences are approval, attention or recognition, and physical assistance.
3. The **ingestive** subsystem satisfies appetite. It is governed by social and psychologic considerations as well as biologic.
4. The **eliminative** subsystem excrete body wastes.
5. The **sexual** subsystem functions dually for procreation and gratification.
6. The **achievement** subsystem attempts to manipulate the environment. It controls or masters an aspect of the self or environment to some standard of excellence.

7. The **aggressive** subsystem protects and preserves the self and society within the limits imposed by society.

Each of the above subsystem has the same functional requirements: protection, nurturance, and stimulation. The subsystem's responses are developed through motivation, experience, and learning and are influenced by bio-psycho-social factors.

Other concepts associated with Johnson's model are equilibrium, a stabilized more or less transitory resting state in which the individual is in harmony with the self and the environment; tension, a state of being stretched or strained; and stressors, internal or external stimuli that produce tension and result in a degree of instability.

The steps of the nursing process are incorporated with Dorothy Johnson's behavioral system model. Nursing process is a deliberate activity where the practice of nursing is performed in a systematic order. Dorothy Johnson presents a three step nursing process. The steps are entitled nursing diagnosis which is parallel to the assessment and diagnostic phase, the second step nursing goal equals the implementation and third step is evaluation. This study focuses on the caregivers of the patient and the dependency subsystems.

### **Assessment**

Assessment is the process of collecting data regarding each sub-system. In this study assessment was done in the dependency subsystem. Data on the demographic characteristics of the caregivers (age, sex, education, occupation, relationship with the patient, period of stay with the patient, instructions and source of instructions received regarding care of patients with CVA) were collected. The ability of caregivers regarding the techniques in meeting selected care needs were assessed by an observational Check list.

### **Diagnosis**

Through assessment of the subsystem problems are identified and diagnosed which provide the basis for intervention. In this study the data collected through observational Checklist and interview schedule were analyzed and the diagnosis was

made on level of ability of attendants and categorized into excellent, good, average and poor.

### **Nursing goals (planning)**

After diagnosis is made the goal is to maintain or restore the dependency subsystem's balance and stability through planning interventions. In this study the goal was to improve the caregiver's level of ability in giving meeting selected care needs of patients with cerebrovascular accident.

### **Intervention**

Nursing activity as an external regulatory force assists the person to regain equilibrium. Based on diagnosis, nursing actions can be planned in terms of teaching or providing resources needed. In this study the nursing activity was educating the attendants regarding the techniques in meeting selected care needs of patients with cerebrovascular accident and participating them in those care activities.

### **Evaluation**

Evaluation refers to reassessment of the subsystem which is identified as problematic for balance previously. In this study the investigator compared the ability of patient attendants in meeting the selected care needs of experimental group with control group by using criteria and evaluated the effectiveness of the intervention.

**Figure-1** High lights the conceptual framework on modified nursing process based on Dorothy **E. Johnson's** Behavior System Model (1980).

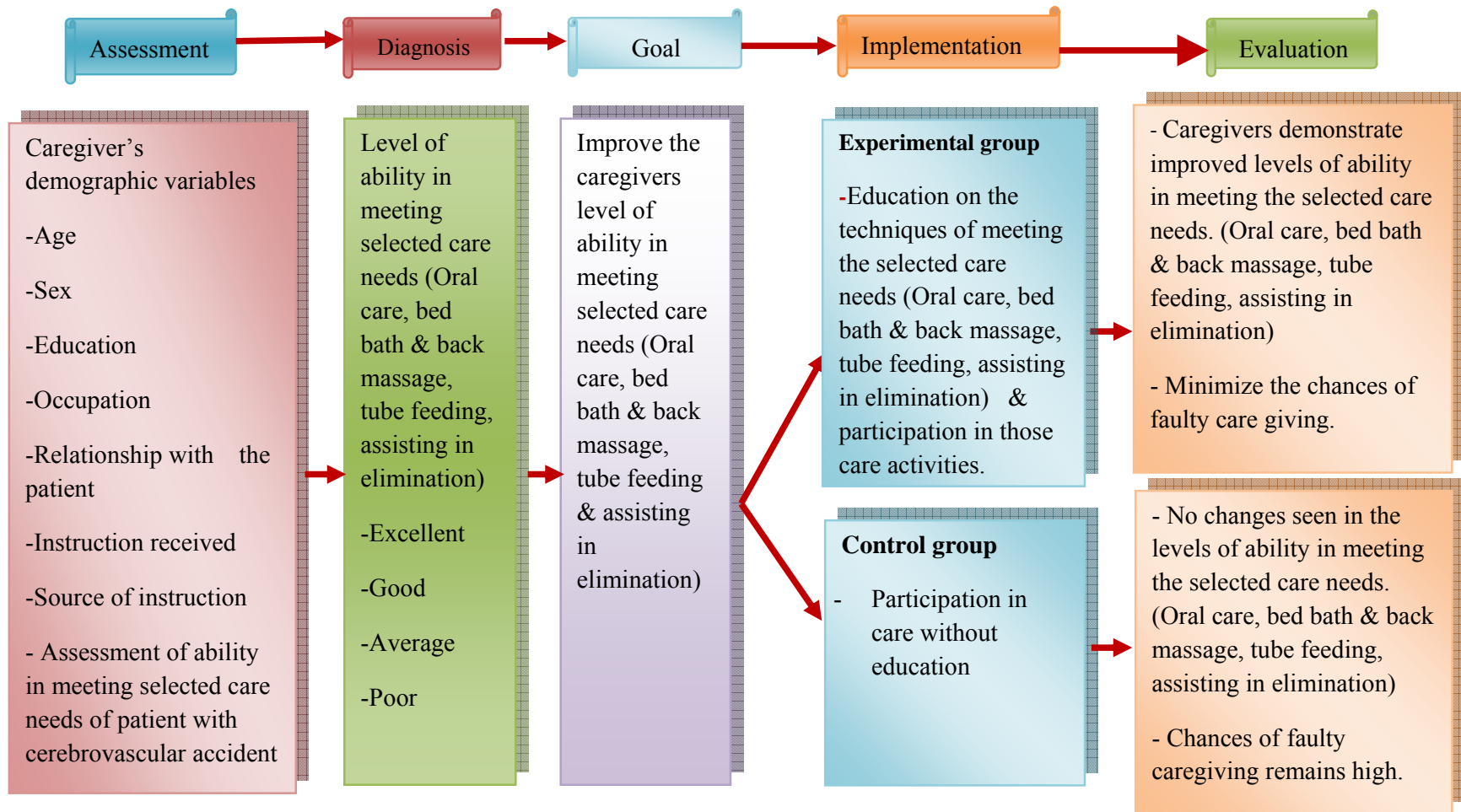


FIGURE 1. MODIFIED NURSING PROCESS BASED ON DOROTHY. E. JOHNSON'S BEHAVIOR SYSTEM MODEL (1980)



**REVIEW**  
**OF**  
**LITERATURE**

## **CHAPTER –II**

### **REVIEW OF LITERATURE**

The review of literature in a research report is a summary of current knowledge about a particular practice-problem (**Nancy & Burns 2002**). A literature review is an organized writer's presentation of what has been published on a topic by the scholars. The task of reviewing literature involves the identification, selection, critical analysis and reporting of existing information on the topic of interest.

According to **Polit and Hungler (1999)**, review of literature is a critical summary of research on a topic of interest generally prepared to put a research problem on context or to identify gaps and weaknesses on previous studies to justify a new investigation.

The researcher has reviewed various theoretical and empirical literature related to the topic under study. The relevant and related literature that was found useful has been presented here.

**The literatures have been organized under the following heading:-**

- 1. Studies related to care needs of patients with stroke**
- 2. Studies related to Supporting Family Caregivers in Stroke Care.**
- 3. Studies related to the Effectiveness of Structured Teaching on Caregivers.**
- 4. Studies related to Caregiver Training in other disease conditions**

#### **1. Studies related to care needs of patients with stroke**

**Burton CR & Payne S (2009)**, conducted a study on the palliative care needs of acute stroke patients. They conducted a prospective study of 191 acute stroke patients who were admitted to a hospital in England. Biographical, medical and stroke-related data were collected. Participants completed the Sheffield Profile for Assessment and Referral to Care (SPARC), a screening tool for referral to specialist palliative care. The results showed that acute stroke patients had a high prevalence of palliative care needs.

**Jessica Beavan and Simon Paul Conroy ( 2009)**, conducted a study on the looped nasogastric tube feeding on improving the nutritional delivery of patients with dysphagia after stroke. They conducted a randomised controlled trial of 104 patients with acute stroke fed by NGT in three UK stroke units. Results showed that looped NGT feeding improved delivery of feed and fluids and reduced NGT reinsertion with little additional cost.

**Lalit Kalra (2000)**, conducted a study on alternative strategies for stroke care. This study compared the efficacy of stroke unit with stroke team or domiciliary care. A single-blind, randomised, controlled trial was undertaken in 457 acute-stroke patients, randomly assigned to stroke unit, general wards with stroke team support, or domiciliary stroke care, within 72 hrs of stroke onset. Outcome was assessed at 3, 6, and 12 months. 152 patients were allocated to the stroke unit, 152 to stroke team, and 153 to domiciliary stroke care. 51 (34%) patients in the domiciliary group were admitted to hospital after randomization. Mortality or institutionalization at 1 year were found lower in patients on a stroke unit than for those who received care from a stroke team. The findings of the study showed that, mortality or institutionalization at 1 year were lower in patients assigned to a stroke unit than for those receiving care from a stroke team. As a result of reduction in mortality they concluded that stroke units were more effective than a specialist stroke team or specialist domiciliary care in reducing mortality, institutionalization, and dependence after stroke.

**Ruth Bonita and Neil Solomon (1998)**, conducted a study on Prevalence of Stroke and Stroke-Related Disability. The estimates of prevalence were derived from two population-based studies conducted 10 years ago in Auckland, New Zealand. The first, included information on survival and stroke-related disability to 14 years after the stroke, and the second, included this information up to 3 years after stroke. *The results showed that 7491 people (3793 men and 3698 women), living in Auckland (whose total population was 9,45,000) in 1991 had experienced a stroke at some stage in the past. Only those who have made an incomplete recovery were considered, prevalence fell up to 461 per 1, 00,000. Of this group, one third required assistance in at least one self-care activity.*

**E A Hakim (1999)**, conducted a study on the factors which influenced the length of hospital stay of stroke patients and an analysis of the relative importance of

10 pre-selected variables on the length of hospital stay of all patients admitted with a clinical diagnosis of stroke. The data were collected prospectively. They conducted the study in two teaching hospitals serving the city of Southampton and Southwest Hampshire, in forty-six consecutive stroke patients. The results showed that patients who were less than 70 years of age stayed shorter periods in hospital than older subjects. Other factors associated with shorter hospitalization were a stroke type other than total anterior circulation infarct. A delay in the provision of equipment and home adaptations and waiting for placement in a private nursing home were the best predictors of long hospital stays of stroke patients

**Christopher Burton & Julia Addington-Hall (2009)**, conducted a study on end-of-life issues in acute stroke care. The aims of this qualitative study were to identify patients and family members experiences of acute stroke and their preferences for end-of-life care. Twenty-eight purposely sampled patients with an acute stroke who had high ( $n = 13$ ) and low ( $n = 15$ ) disability were selected from 191 sequential cases admitted to two general hospitals in north-east England. In addition, 25 family members of other stroke patients were recruited. Views about current stroke services and preferences for end-of-life care were elicited in semi-structured interviews. Where patients were thought to be dying, family members were keen to ensure that the death was peaceful and dignified. No family member reported being offered the possibility of the patient dying at home. The findings demonstrated the importance of improving communication between the patient, his family and health professionals for seriously ill patients with stroke in UK hospitals.

**Lise R Talbo & Chantal Viscogliosi (2006)**, conducted a study on identification of rehabilitation needs after a stroke. Data were collected among four groups of experts: patients, caregivers, health care providers and administrators. Their study showed that improving accessibility to healthcare services, respecting priority parking spaces for the disabled as well as promoting public awareness enabled a better social re-integration and recovery of social roles, thus limiting the onset of handicap situations.

## **2. Supporting Family Caregivers in Stroke Care**

**May H.L. Lui, Fiona M. Ross and David R Thompson (2004)**, conducted a study on Supporting Family Caregivers in Stroke Care and teaching effective problem-solving skills to family caregivers of patients with chronic disease. A structured review of literature identified from nursing, medicine, and psychology databases from 1970 to 2004 was conducted. Eleven articles reporting the development or evaluation of effective problem-solving interventions for caregivers of patients with stroke were critically appraised using recognized quality criteria. The results of this review showed that teaching effective problem-solving skills to family caregivers was useful in promoting physical and psycho-social well-being.

**Susan C. Reinhard, Barbara Given & Nirvana Huhtala Petlick (2004)**, conducted a study to assess the effectiveness of Supporting Family Caregivers in providing Care. Results showed that Family caregivers are critical partners in the plan of care for patients with chronic illnesses. It was also suggested that nurses should be concerned with several issues that affect patient safety and quality of care as the reliance on family care giving grows. Improvement can be obtained through communication and caregiver's support to strengthen caregiver's competency and teach caregivers new skills that will enhance patient safety.

**Teresa Cervantez Thompson, & Linda L. Pierce (2004)**, conducted a study on Learning the Role of Caregiver among new caregivers of persons with stroke (n=9). The theme was related to changes undertaken as the role of caregiver. The qualitative analysis was based on telephone interviews and caregiver computer entries (n=563). They discussed the basics of managing activities of daily living and problem solving strategies. The findings reinforced the need for nurses to identify caregivers as a recipient of care and assist and support them in adjusting to this role.

**Lee J, Soeken K, Picot SJ & West J Nurs Res. (2007)**, conducted a study to examine the effectiveness of the interventions, for improving mental health of caregivers of people with stroke at Baltimore. A meta-analysis was performed to summarize findings of intervention studies of caregivers of elderly stroke patients. The results showed that overall interventions improved mental health of informal stroke caregivers.

### **3. Studies related to the effectiveness of training programs for caregivers.**

**Forster A, Smith J & Young J (2000)**, conducted a study on Information provision for stroke patients and their caregivers. They identified 152 abstracts, of which 36 studies were potentially relevant to this review. The analysis included nine completed trials. The trials evaluated the provision of information on stroke care. The results showed that there was some evidence that information combined with educational sessions improved knowledge and was more effective than providing information only.

**V. Hentlin shiny (2008)**, conducted a study to assess the effectiveness of teaching programme on prevention of pressure ulcer in bed ridden patients among care givers. The study was conducted with 55 subjects in Bapuji hospital, Davangere using evaluative pre- experimental approach, on this basis one group pretest post design was used. Result reveals that the structured teaching programme was effective in prevention of pressure ulcer among bed ridden patients.

**Cole L. Nesbitt C (2004)**, conducted study to evaluate the outcomes of prevention education and skin integrity interventions on the incidence of pressure ulcers. These results suggested that education and implementation of appropriate skin care products and procedures and pressure ulcer prevention protocols may reduce the incidence of hospital acquired pressure ulcer.

**Choi JS, Seo YM & Kwon IS. (2006)**, conducted a study on effects of education on knowledge and practice of caregivers of the stroke patient. The research design was a non-equivalent control group non-synchronized design. The subjects were 40 primary caregivers of stroke patients. The stroke patient care education developed in this study showed a significant promotion of knowledge and practice of caregivers.

**Oupra R & Griffiths R (2010)**, conducted a study on Effectiveness of Supportive Educative Learning Programme on the level of strain experienced by caregivers of stroke patients in Thailand. There is no stroke rehabilitation team in the community in Thailand. Therefore, family caregivers are the primary source for ongoing care and support. While family members accompany patients during their

hospitalization, they receive little information about how to assist their relatives, and as a result they feel inadequately trained, poorly informed and dissatisfied with the support that is available after discharge. Family caregivers reported that they suffer both physically and psychologically and find themselves overwhelmed with strain, experiencing burden and exhaustion. This study aimed to develop and implement a nurse-led Supportive Educative Learning programme for family caregivers (SELF) of stroke survivors in Thailand and to evaluate the effect of the SELF programme on family caregiver's strain and quality of life. This was a non-randomized comparative study with concurrent controls, using a two-group pre-test and post-test design. A total of 140 stroke survivors and 140 family caregivers were recruited; 70 patients/caregiver pair in each group. Caregivers of patients admitted to the intervention hospital following an acute stroke received the intervention, while caregivers of patients admitted to the comparison hospital received the usual care provided at the hospital. The data were collected prior to discharge of the patients and after 3 months. The family caregivers in the intervention group had a significantly better quality of life than the comparison. This research demonstrated that providing education and support to the family caregiver of stroke survivors can reduce caregiver strain and enhance their quality of life.

**Louie SW, Liu PK, Man DW. (2006)**, the effectiveness of a stroke education group on persons with stroke and their caregivers. The aim of this study was to explore whether the stroke educational group could increase stroke-related knowledge, and improve perceived health status, in persons with stroke and their caregivers, and thus reduce the stress induced during the care-giving process. In this study a quasi-experimental design, that included a pre-test and a post-test, was employed on a total 54 patients with stroke and 32 caregivers who participated in a 2-week stroke educational group. The outcome measures included a Stroke Knowledge. The tests were administrated before and after the running of the stroke educational group as well as, during the 1-week, 2-week and 1-month follow-up sessions. A significant association between the total scores in the stroke knowledge test and the admission scores in the Mini Mental State Examination of the patients was also revealed. The results suggest that there was an improvement in the acquisition of stroke-related knowledge by both patients with stroke, and their caregivers, after a stroke educational group. A further study exploring the behavioral

changes of individuals with stroke and their caregivers after attending a stroke educational group is recommended.

**Witness Mudzi (2010)**, conducted a study on impact of care giver education on stroke survivors and their care givers. The aim of the study was to establish the impact of caregiver education on the morbidity of the stroke survivors and on the quality of life of the stroke survivors and their carers. A total of 200 patients and their caregivers participated in the study. These were randomly assigned to either the control group or the experimental group. The caregivers in the experimental group were subjected to an individualised training programme just prior to discharge of the patient with stroke and at the three month follow up. The results showed that the structured and individualised caregiver training had the effect of improving patients' quality of life and can help reduce deaths among stroke survivors.

**Hafsteinsdóttir TB, Vergunst M & Lindeman E (2011)**, conducted a systematic review of the literature on Educational needs of patients with a stroke and their caregivers. 21 studies were included in the review. The results showed that stroke patients and caregivers reported many and diverse educational needs, which often were not met. The educational needs of stroke patients and caregivers concerned knowledge about the clinical aspects of stroke, prevention, treatment and functional recovery. The most commonly reported needs of caregivers involved patients' moving and lifting, exercises, psychological changes and nutritional issues. Patients and caregivers wanted information that was tailored to their situation.

**Wasserman S, de Villiers L & Bryer A. (2009)**, conducted a study on Community-based care of stroke patients in a rural African setting .Thirty consecutive stroke patients from the local hospital were assessed clinically (including Barthel index and modified Rankin scores) at the time of discharge and re-assessed 3 months after discharge in their homes by a trained field worker using a structured questionnaire. The results showed that two-thirds of all families received no stroke education before discharge. All patients were discharged into family care as there was no stroke rehabilitation facility available to the community. The 3-month mortality rate was high. Most survivors improved functionally but were left with significant disability and the measures to improve family education and the level of home-based



care can reduce carer strain and reduce the degree of functional disability in rural stroke patients.

**H Van Veenendaal, D R Grinspun, H P Adriaanse (1996)**, conducted a study on educational needs of stroke survivors and their family members, as perceived by themselves and by health professionals. In the study 35 stroke survivors, 39 family members and 43 health professionals participated. The results showed that stroke survivors and family members indicated to desire the most information regarding coping with stress, strategies to perform activities of daily living, and reducing the chance of a new stroke.

**Anita Patel, Martin Knapp & Andrew Evans (2004)**, conducted a study on effectiveness of Training care givers of stroke patients. They conducted the study in a stroke rehabilitation unit. A total of 300 stroke patients and their care givers participated in the study. The design used was a single, blind, randomized controlled trial. They had given caregiver training in basic nursing and facilitation of personal care techniques and compared with no caregiver training. The results showed that when compared with no training, caregiver training during rehabilitation of patients reduced costs of care while improving overall quality of life in care givers at one year.

**Mohammed Shinde (2009)**, conducted a quasi-experimental study to assess the effectiveness of demonstration regarding feeding of hemiplegia patient among caregivers. Objectives of the study were to assess the practices of feeding among caregivers before and after demonstration and determine the association of selected socio-demographic characteristics with feeding skills. The study was done on 60 samples with pre-test post-test design to assess effectiveness in oral and nasogastric feeding. Out of sixty, 30 samples were selected for assessing oral feeding and other 30 were selected for nasogastric tube feeding. Major finding in the study include majority of the caregivers were in the age group of 28-37 yrs. 53-63% were females, 40-60% were unemployed and 70-80% were married. Result also showed that both oral and nasogastric feeding group had significant improvement in skill score after the intervention. No significant relationship was shown with regard to age, sex, education, occupation and marital status.

**Wilz G, Böhm B.(2007),** conducted a study on interventions for caregivers of stroke patients need and effectiveness. After discharge from hospital most stroke patients are being cared for by relatives. In the majority of cases it does mean long-term demands for relatives and often it has also an effect on their health. Five types of intervention concepts for supporting relatives of stroke patients can be differentiated so far namely, special services, training, counselling, social support through other caregivers and multi-component interventions. On the basis of 42 intervention studies an attempt was being made to give a preliminary statement about the effectiveness of intervention models. The multi-component interventions combined with psychotherapeutic strategies seem to emerge as a recommendable concept.

#### **4. Studies related to care giver training in other disease conditions**

**Sinnakaruppan et al., (2005),** conducted a study on effectiveness of care giver training among caregivers of ABI (Acute Brain Injury) patients in decreasing patient and caregiver distress and increasing coping ability. N=99, 49 ABI patients and 50 caregivers were randomly assigned to receive either no training (control group) or an educational training program (experimental group) to determine the effects of formal help provided to ABI patients and their caregivers in decreasing patient and caregiver distress and increasing coping ability. The caregivers and patients in the experimental group separately received 8 sessions of formal training with each session lasting approximately 2.5 hours. Patients and caregivers in both experimental and control groups were assessed before, after, and 3 months post-intervention. Following the educational intervention, caregivers in the experimental group experienced less psychological distress compared to caregivers in the control group. Patients in the experimental group showed statistically significant improvements in the outcomes compared to the control group at the 3-month follow-up.

**Adams MS& Khan NZ (2011),** conducted a study on feeding difficulties in children with cerebral palsy and low-cost caregiver training in Dhaka. The aim of this study was to evaluate the effect of a Training Program for Informal Caregivers on the quality of life of elderly people with a deficit in self-care. Home visits were initially made to 15 elderly patients and the SF-36 questionnaire was applied. A multi-professional training program for the caregivers of these elderly people was then

developed. The SF-36 questionnaire was again applied after 2 months of the training program to verify its effectiveness on the quality of life of the elderly people. On average a significant increase of scores related to "mental health" and a significant decrease in "limitations of physical aspects" was detected. The training of informal groups of caregivers by professionals from the healthcare area should be encouraged in order to promote awareness, exchange experiences and discuss the best inherent strategies for care.

**Stephens JR & Farhall J (2011)**, conducted a study on effectiveness of a family education programme for carers of people with a mental illness. They employed a pre-post design to evaluate the effectiveness of Well Ways in a naturalistic setting using a sample of carers of people with a mental illness. The Involvement Evaluation Questionnaire, a measure of care-giving consequences including worrying, tension, urging and supervision, and incorporating the General Health Questionnaire-12 (GHQ-12), was completed by 459 carers before and after participation in Well Ways. Participants' worrying, tension, urging and distress (GHQ-12) were significantly lower following completion of the programme. These improvements were maintained at 3 and 6 month follow up. Carers of people with a psychotic disorder experienced significantly greater reductions in worrying than the other carers. Females reported significantly greater reductions in tension than did males. Findings highlight the need for programmes such as Well Ways.

**Chien WT & Lee IY. (2011)**, conducted a Randomized controlled trial of a dementia care programme for families of home-resided older people with dementia. The aim of the study was to examine the effectiveness of a 6-month dementia care programme for Chinese families living with and caring for a relative with dementia, compared with routine family support services. A randomized controlled trial was conducted with 92 Chinese families of a relative with dementia in two dementia care centers in Hong Kong. They were randomly selected from a dementia client list and then randomly assigned to receive either the dementia family care programme (n=46), or routine care only (n=46).. Data was collected over a period of 24 months, between September 2007 and August 2009. Results of the study showed significantly greater improvements in clients' symptoms and institutionalization rates, and caregivers' quality of life and burden, when compared with their counterparts in the routine care

group. These findings provided the evidence that the dementia care family programme can improve the psychosocial functioning of both clients with dementia and their family caregivers in a Chinese population.

**J Wound (2009)**, conducted a study on Evaluation by patients and caregivers on the effectiveness of a brochure developed to prevent pressure ulcers. They evaluated the opinions and recommendations of patients at moderate to high risk for pressure ulceration and their caregivers about discharge education and asked them to evaluate an educational brochure about pressure ulcer prevention. The study group comprised 33 hospital patients and 33 caregivers. Data were collected over a 1-month period. The researchers provided a verbal educational intervention for patients and their care providers and then gave participants the educational brochure. The results showed that patients and care providers rated the language level and the effectiveness and usefulness of the knowledge in the pamphlet as "satisfactory". Both patients and families ranked an educational approach to pressure ulcer prevention that combined teaching sessions with written materials as satisfactory, where the majority of care is provided by lay care providers (usually family members) in the home setting.

**Elaine wittenberg (2001)**, conducted a study to assess the knowledge and skills of caregivers regarding the care of the patient. The result showed that many family caregivers do not have the necessary skills and knowledge to provide sustained care for a person with acute or chronic illness, so they lack confidence and felt unprepared. Caregivers reported that they received little guidance from health providers, that they did not know how to assume the caregivers role, that they were not familiar with the type and amount of care expected, and that they did not know how to access and effectively utilize the resources.

**Wellman N S.et.al (2002)**, conducted a study among family caregivers of older adults on home enteral nutrition. Objectives of the study were to describe specific tasks of family caregivers and their preparedness, competence, effectiveness and health care uses. Home interviews were conducted with 30 family caregivers of older adults on home enteral feeding. Results showed that caregivers were providing 6-160 hrs of care weekly. Caregivers were poorly prepared for accomplishing their role. Training needs were identified highly in the areas of technical and nutrition related tasks.

**Guerra M, Ferri CP & Fonseca M (2011)**, conducted a study on helping carers to care: the 10/66 dementia research group's randomized control trial of a caregiver intervention in Peru. A randomized controlled trial was performed involving 58 caregivers of people with dementia that received the intervention in the beginning of the trial (n = 29) or six months later (n = 29). The intervention consisted of three modules: 1) assessment (one session); 2) basic education about dementia (two sessions); and 3) training regarding specific problem behaviors (two sessions). Main outcome measures: Caregivers and patients with dementia were assessed at baseline and after six months. Caregivers in the intervention group reported significantly decreased strain measures six months after the intervention compared to controls. No group differences were found in respect to the caregivers' psychological distress and to quality of life in both caregivers and patients.

**Nicol R & Petrina Sweeney M (2005)**, conducted a study on effectiveness of health care worker training on the oral health of elderly residents of nursing homes. Seventy-eight residents of five long-stay institutions were enrolled and underwent a baseline oral health assessment. Staff caring for residents in three of the sites received intensive training in mouth care. This comprised lecture and video material complemented by clinical demonstrations. The oral health of residents at all five sites was reassessed at periods of 3 and 9 months. Staffs caring for residents in the remaining two institutions were then provided with mouth care training and all patients were reassessed at 18 months. Statistical analyses were undertaken to examine for significant changes in selected oral health parameters after training, within each group. The results showed that, oral mucosal disease and oral dryness were common at baseline. The staff training was well received. Following staff training, there was a significant reduction in the number of residents left to undertake their own oral care. There were significant improvements in denture hygiene and a reduction in the number of residents wearing dentures overnight. The prevalence of oral mucosal disease dropped, with significant reductions in angular cheilitis and denture stomatitis. This education programme was effective in changing oral health care procedures within long-stay institutions for the elderly, with measurable improvements in oral health of the residents.

## **CONCLUSION**

The review of literature enlightened the investigator to develop an insight in to the teaching and its effectiveness. This review helped the investigator to gain a deeper knowledge of the research problem and guided in designing the study.

# **METHODOLOGY**

## **CHAPTER- III**

### **RESEARCH METHODOLOGY**

Methodology of research organizes all the components of the study in a way that is most likely to lead to valid answer to the problems that have been posed (**Burns and Grove 2002**). It refers to various logical steps that are generally adopted by the investigator in studying the research problem.

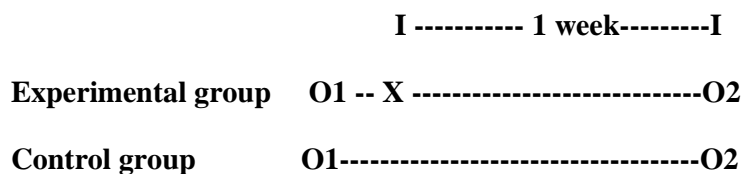
This chapter presents research design, setting, population, sample size, sampling technique, sampling criteria, description and construction of tool, validity, reliability, pilot study, data collection procedure and data analysis adopted for the study.

#### **RESEARCH APPROACH**

The research approach is an overall plan chosen to carry out the study. The selection of research approach is the basic procedure for the conduction of research inquiry. An evaluative approach was used in this study as the study aimed at assessing the effectiveness of participation of patient's attendants in care of patients with cerebrovascular accident in improving their ability in meeting selected needs of the patients.

#### **RESEARCH DESIGN**

A quasi-experimental design having both experimental and control groups was used. The groups were non-randomized hence may lack strict homogeneity. It was a pre-test post-test nonequivalent control group design.



O1- Assessment of the ability to meet selected care needs in the experimental and control group before intervention.



O2- Assessment of the ability to meet selected care needs in the experimental group after intervention and in control group without intervention on the seventh day.

X – Education through participation of patient attendants along with the care giver in giving care to patients with Cerebrovascular accident.

## **VARIABLES IN THE STUDY**

- a) **Independent variable:** Participation of patient attendants in care
- b) **Dependent variables:** Ability of the attendants in meeting selected needs of Cerebrovascular accident patients (oral care, bed bath and back massage, tube feeding and assisting in elimination).

## **SETTING OF THE STUDY**

The researcher carried out the study in a selected government hospital in Manjeri, Kerala. This is a 501 bedded multi-specialty hospital with facilities for emergency care, medical & surgical treatment, intensive care, etc. The hospital has three floors and 2 blocks.

Ground floor consists of the Emergency department, Pay ward, Physiotherapy department, all the Outpatient departments, X ray, CT scan, and Laboratory facilities. First floor consists of the Ophthalmology ward and Out patient department, Operation theatre, Post operative ward, Labour room, Ante-natal and Post-natal wards, Intensive Care Units and Nursing office. Second floor consists of the pediatric ward and 2 Medical wards with 40 beds in each ward. There was no separate ward for cerebrovascular accident patients. The cerebrovascular accident patients were admitted in the medical wards, and only one attendant was allowed inside the ward. Third floor consists of the surgical ward for male and female patients.

Patients from casualty and Outpatient department are sent to Medical intensive care unit, surgical intensive care unit, medical or surgical ward based on the severity of the condition. From Medical intensive care unit / surgical intensive care unit also once the patients are stable they are shifted to medical or surgical ward before discharge.

The study was done in the medical wards in the second floor.

## **POPULATION**

All the attendants of patients with cerebrovascular accident admitted in the medical department of the selected hospital at the time of study and fulfilled the eligibility criteria.

## **SAMPLE SIZE**

The sample consisted of 40 attendants of patients with cerebrovascular accident (control group-20, experimental group-20), who were selected from the population based on the sampling criteria.

## **SAMPLING TECHNIQUE**

Non probability convenient sampling method was used. The samples meeting the inclusion criteria were included for the study according to the availability of the sample. Samples for the experimental group were taken from one ward and control group were from another ward.

## **SAMPLING CRITERIA**

### **Inclusion criteria:**

The inclusion criteria included for the selection of the samples were

- 1) Attendants who were with the patient and assumed responsibility for assisting in the patient care activities.
- 2) Attendants in the age group between 20 yrs and 60 yrs.
- 3) Attendants of patients with cerebrovascular accident
- 4) Attendants who knew Malayalam language.
- 5) Attendants who were interested and cooperative.

### **Exclusion criteria:**

The exclusion criteria included were

- 1) Attendant who was a trained health care service personal.
- 2) Attendant who spent only few hours (Less than 6 hrs) with the patient in a day including the visitors.

3) Attendants of critically ill patients.

## **DESCRIPTION OF THE TOOL**

The tools used for the study was an interview schedule and observation check list.

### **Interview schedule**

The interview schedule was designed to collect information regarding the demographic data which included 9 characteristics such as age, sex, education, occupation of the attendants, relationship with the patient, period of stay with the patient, instruction received regarding care of patients with Cerebrovascular accident and the source of instruction.

### **Observational checklist**

An observational Check list was prepared to record the ability of the attendants in meeting the care needs of cerebrovascular accident patients. Four check lists were prepared to assess the technique of care giving at the four selected activities of care such as oral care, bed bath and back massage, tube feeding and assisting in elimination. In each check list the steps of technique were written logically and two columns were provided to record the pre intervention and post intervention observation.

#### **Observation checklist to assess oral care technique**

This checklist consisted of 12 items to assess the ability of patient's attendants in providing oral care.

#### **Observation checklist to assess the technique of bed bath and back massage.**

This checklist consisted of 17 items to assess the ability of patient's attendants in providing bed bath and back massage.

#### **Observation checklist to assess the technique of tube feeding.**

This checklist consisted of 18 items to assess the ability of patient's attendants in providing tube feeding.

### **Observation checklist to assess the technique of assisting in elimination.**

This checklist consisted of 13 items to assess the ability of patient's attendants in assisting in elimination.

### **DEVELOPMENT OF THE TOOL**

The tool was developed based on the objectives of the study, review of literature and discussion with experts. The investigator's own experience of working in the medical departments contributed for the development of the tool.

### **PLANNED INTERVENTION**

#### **Step 1**

The patient's attendants were assessed for their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding and assisting in elimination) of the cerebrovascular accident patients.

#### **Step 2**

The investigator demonstrates the techniques of meeting selected care needs (oral care, bed bath and back massage, tube feeding and assisting in elimination) individually to the patient's attendants.

#### **Step 3**

The investigator encourages the participation of patient's attendants while meeting selected care needs (oral care, bed bath and back massage, tube feeding and assisting in elimination)

#### **Step 4**

The patient's attendants were again assessed for their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding and assisting in elimination) of the cerebrovascular accident patients.

## SCORING AND INTERPRETATION OF SCORING

### SCORING

A score of 1 was assigned for the presence of a step in the technique and zero score was assigned for the absence of a step in the technique. The minimum and maximum score for the four check lists were as follows.

	Minimum	Maximum
Oral care technique	0	12
Bed bath and back massage	0	17
Tube feeding	0	18
Assisting in elimination	0	13
Total	0	60

### GRADING

Based on the score range the grading was done as follows

Technique	Score	Grading
Oral care technique	10 to 12	Excellent
	7 to 9	Good
	5 to 6	Average
	0 to 4	Poor
Bed bath and back massage	13 to 17	Excellent
	10 to 12	Good
	6 to 9	Average
	0 to 5	Poor

Tube feeding	14 to 18	Excellent
	10 to 13	Good
	7 to 9	Average
	0 to 6	Poor
Assisting in elimination	11to13	Excellent
	8 to 10	Good
	6 to 7	Average
	0 to 5	Poor
Overall score	48-60	Excellent
	36-47	Good
	24-35	Average
	0-23	Poor

### **VALIDITY OF THE RESEARCH TOOL**

The research tools including the objective of the study along with the criteria check list were submitted to five experts – three Nurse Educators, one Physician and one Neurologist. The nursing experts were Professors with Masters Degree in Nursing and working in different colleges of nursing in Coimbatore with more than 5 years of experience.

The physician was a Retd. Professor and had more than 25 yrs of experience and was working in a private hospital at Coimbatore. The Neurologist was working in a government hospital at Coimbatore and had more than 10 years of experience.

### **RELIABILITY OF THE RESEARCH TOOL**

In order to check the reliability of observational checklists interrater method was used. Each of the checklists was assessed by two persons at the same time, the investigator did the observations and it was counter checked by another trained

person. 8 samples were observed. Correlation co-efficient was calculated by Karl Pearson correlation method. The value obtained for oral care technique was 0.835, technique of bed bath and back massage was 0.801, technique of tube feeding was 0.867, and technique for assisting in elimination was 0.834. these values showed that there was high positive correlation and internal consistency of the checklists.

## **PILOT STUDY REPORT**

A pilot study was conducted in the same selected hospital to test the feasibility of the study. Permission was obtained from the concerned authority of the department of Health & family planning. The study was carried out over a period of 12 days from 23-08 2011 to 3- 09 – 2011. Ten samples were selected from the attendants of cerebrovascular accident patients who were admitted in the inpatient department of medical units of the hospital and fulfilled the inclusion criteria. Five for experimental group from one ward and five for control group from another ward were selected by convenient sampling method.

After self introduction, the investigator explained the nature of the study to the samples. After developing a good rapport and obtaining the willingness the investigator collected the demographic data from the samples by interviewing them. A pre test was given individually to both the experimental and the control group by assessing their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding, assisting in elimination) using a checklist. In the experimental group the technique of meeting selected care needs – oral care, bed bath and back massage, tube feeding, assisting in elimination were demonstrated, on the first day after the pretest and the next 2 days they all participated in the care along with the investigator and corrections and encouragement were given during their participation. After 1 week post test was conducted. No intervention was given for the control group after pre test, and subsequent observation was done after 1 week.

The total period of data collection was 12 days. The pilot study confirmed the adequacy of the tool and technique. Hence no modification was required.

## **DATA COLLECTION PROCEDURE**

Before commencement of data collection, permission was obtained from the concerned authority of the Department of Health & Family Welfare and the Medical Superintendent of the hospital. The Nursing Superintendent of the hospital and the ward in charge were contacted and briefed about the study. The researcher familiarized with the ward and identified the samples. The study was carried out from 5 -09- 2011 to 7- 10 –2011. Over a period of 5 weeks. 40 samples were selected from the attendants of cerebrovascular accident patients who were admitted in the inpatient department of medical units of the hospital and fulfilled the inclusion criteria. 20 samples in experimental group from one ward and 20 samples in control group were selected from another ward through convenient sampling method.

After self introduction, the investigator explained the nature of the study to the samples. After developing a good rapport and obtaining the willingness the investigator collected the demographic data from the samples by interviewing them. A pre test was given individually to both the experimental and the control group by assessing their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding, assisting in elimination) during the time they were giving care to the patients using a checklist. In the experimental group the technique of meeting selected care needs – oral care, bed bath and back massage, tube feeding, assisting in elimination were demonstrated individually by the investigator , on the first day after the pretest and the next 2 days they all participated in the care along with the investigator and corrections and encouragement were given during their participation. After 1 week post test was conducted. No intervention was given for the control group after pre test, and subsequent observation was done after 1 week.

The caregivers in the control group were also taught and allowed to clarify their doubts after the data collection was over for their benefits.

## **PLAN FOR DATA ANALYSIS**

The data obtained were analyzed using descriptive and inferential statistics.



### **Descriptive statistics**

Frequency and percentage distributions were used to analyze demographic variables and to assess the level of ability of experimental and control group in meeting selected care needs of patients with cerebrovascular accident before and after the intervention.

Mean and mean score percentage was used to determine the difference in the level of ability in meeting selected care needs.

### **Inferential statistics**

Paired and unpaired 't' test was used to determine the significant difference in the level of ability in meeting selected care needs between the experimental and control group before and after intervention.

'Chi square' test was used to assess the association of selected demographic variables with the level of ability.

### **Ethical consideration**

Permission was obtained from the Department of health and family welfare and higher authorities of the hospital. Nature, purpose and type of the study and intervention were explained and obtained the consent of the caregiver. Privacy and comfort of the samples were maintained throughout the study. Adequate explanation was given whenever they asked questions, and records were maintained for each caregiver confidentially. Control group samples were also taught and allowed to clarify their doubts in meeting selected care needs after completing the data collection for their benefits.

# **ANALYSIS & INTERPRETATION**

## CHAPTER IV

### ANALYSIS AND INTERPRETATION

**Copper. K.L. (2008)** defines data analysis as the “systemic organization and synthesis of research data, and the testing of research hypothesis using those data. Interpretation is the processes of making sense of the results of a study and examining their implications”.

This chapter deals with the analysis and interpretation of the data gathered from 40 caregivers of patients with cerebrovascular accident with regard to their ability to provide care to the patient.

#### **Section – 1. Demographic characteristics of the sample.**

This section deals with the demographic profile of the caregivers in relation to their age, sex, education, occupation, relationship with the patient, period of stay with the patient, instruction received regarding the care of the patient with cerebrovascular accident and source of instruction about the care in frequency and percentage.

#### **Section – 2. Comparison of the level of ability of experimental and control group to provide care to Cerebrovascular Accident patients before and after intervention.**

The level of ability in four aspects of care (oral care, bed bath & back massage, tube feeding and elimination) and overall of the experimental and control group has been analyzed and compared in frequency, percentage, mean score and significant difference before and after intervention.

#### **Section – 3 Association of selected demographic variables with overall level of ability in providing care before the intervention.**

This section presents association of demographic variables with the overall level of ability in providing care in experimental and control group before the intervention

## SECTION – I. THE DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

**TABLE - I**

### **FREQUENCY AND PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO PERSONAL CHARACTERISTICS**

**N = 40**

Sl No:	Characteristics	Experimental group (N=20)		Control group (N=20)	
		F	%	F	%
1.	<b>Age</b>				
	• 20-30 years	2	10.00	1	5.00
	• 31-40 years	7	35.00	3	15.00
	• 41-50 years	10	50.00	14	70.00
	• 51-60 years	1	5.00	2	10.00
3.	<b>Sex</b>				
	• Male	-	-	-	-
	• Female	20	100.00	20	100.00
4.	<b>Education</b>				
	• High school	9	45.00	11	55.00
	• Higher secondary school	6	30.00	7	35.00
	• Graduate	5	25.00	2	10.00
5.	<b>Occupation</b>				
	• Self employment	1	5.00	2	10.00
	• Private employment	2	10.00	3	15.00
	• Government Employment	1	5.00	-	-
	• Unemployed	16	80.00	15	75.00

**Table-I** presents frequency and percentage distribution of samples according to personal characteristics of the sample

**Age:**

The age of the caregivers ranged from 20 – 60 years in experimental and control group. Nearly 45% of the samples (9) in the experimental group and 20% of the samples (4) in the control group were in the age group of 20 to 40 years. 55% (11) in the experimental group and 80% (16) in the control group were in the age group of 41 to 60 years.

**Sex:**

In both experimental and control group 100% of samples (experimental group, n= 20, control group, n= 20) were females.

**Education:**

The caregivers showed different level of education. 25% of the samples (5) in the experimental group and 10% of the samples (2) in the control group were graduates. 30% of the samples (6) in the experimental group and 35% of the samples (7) in the control group had higher secondary education. 45% (9) in the experimental group and 55% (11) in the control group had high school education. No illiterates were found.

**Occupation:**

In both experimental and control group the maximum number of samples 15-16 (75%-80%) were unemployed.

**TABLE-II**  
**FREQUENCY AND PERCENTAGE OF SAMPLES ACCORDING TO**  
**PERSONAL CHARACTERISTICS**

**N=40**

Sl No:	Characteristics	Experimental group (N=20)		Control group (N=20)	
		F	%	F	%
1.	<b>Period of stay with the patient</b>				
	• ≤ 5 weeks	-	-	-	-
	• > 5 weeks	20	100.00	20	100.00
2.	<b>Relationship with the patient</b>				
	• Wife	5	25.00	6	30.00
	• Daughter	12	60.00	10	50.00
	• Sibling	2	10.00	2	10.00
	• Parents	-	-	-	-
	• Others	1	5.00	2	10.00
3.	<b>Instruction received regarding care of CVA patients</b>				
	• Yes	-	-	-	-
	• No	20	100.00	20	100.00

**Table-II** presents the frequency and percentage distribution of samples according to personal characteristics.

**Period of stay with the patient:**

All the samples (100%) in both the groups (experimental group, n= 20, control group, n= 20) stayed with the patient for more than 5 weeks.

**Relationship with the patient:**

25% of samples (n=5) in experimental group and 30% of samples (n=6) in control group were wives. 60% of samples (n=12) in experimental group and 50% of samples (n=10) in control group were daughters. 15% of samples (n=3) in experimental group and 20% of samples (n=4) in control group were siblings and others.

All the samples (100%) in both the group (experimental group, n= 20, control group, n= 20) had not received any instructions regarding care of cerebrovascular accident patients.

**SECTION - 2 - COMPARISON OF ABILITY OF EXPERIMENTAL AND CONTROL GROUP TO PROVIDE CARE TO CEREBROVASCULAR ACCIDENT PATIENTS BEFORE & AFTER INTERVENTION**

**TABLE - III**

**FREQUENCY AND PERCENTAGE OF EXPERIMENTAL AND CONTROL GROUP ACCORDING TO LEVEL OF ABILITY TO PROVIDE OVERALL CARE BEFORE AND AFTER INTERVENTION**

**N=40**

SI.No	Level of ability	Experimental group N=20				Control group N=20			
		Before intervention		After intervention		Before intervention		After intervention	
		F	%	F	%	F	%	F	%
1	Poor	17	85.00	-	-	18	90.00	16	80.00
2	Average	3	15.00	-	-	2	10.00	4	20.00
3	Good	-	-	-	-	-	-	-	-
4	Excellent	-	-	20	100.0	-	-	-	-

**Table III** shows Frequency and percentage of experimental and control group according to level of ability to provide overall care before and after intervention.

Most of the samples in experimental group (85%, n=17) showed poor and 15% samples (n=3) showed average level of ability in providing care and in the control group 90% of samples (n=18) showed poor and 10% of samples (n=2) showed average level of ability in providing care before intervention. After intervention all the samples (100%) (Experimental group, n= 20, Control group, n= 20) in the experimental group showed excellent level of ability. Where as in the control group 80% of the samples (n=16) showed poor level of ability and 20% of the samples (n=3) showed average level of ability in providing care.



The table concludes that the level of ability in providing care to the patients with cerebrovascular accident increased considerably in the experimental group after intervention compared to before intervention. Where as in the control group there was no difference in the level of ability when baseline and subsequent observations were compared.

**TABLE –IV**

**FREQUENCY AND PERCENTAGE OF EXPERIMENTAL AND CONTROL GROUP ACCORDING TO LEVEL OF ABILITY IN DIFFERENT ASPECTS OF CARE BEFORE INTERVENTION**

**N=40**

Aspects of care	Level of ability											
	Good				Average				Poor			
	Exp.		Cont.		Exp.		Cont.		Exp.		Cont.	
	F	%	F	%	F	%	F	%	F	%	F	%
<b>Oral care</b>	1	5.0	-	-	7	35.0	9	45.00	12	60.0	11	55.0
<b>Bed bath &amp; back massage</b>	-	-	-	-	20	100.0	20	100.0	-	-		
<b>Tube feeding</b>	-	-	-	-	-	-	-	-	20	100.0	20	100.0
<b>Assisting in Elimination</b>	1	5.0	-	-	1	5.00	2	10.0	18	90.0	18	90.0

Exp. : experimental group

Cont. :control group

**Table IV** shows Frequency and percentage of experimental and control group according to level of ability in different aspects of care before intervention.

All the samples (100%, n=20) in both the experimental and control group showed poor ability to perform tube feeding.

All (100%) the samples (n=20) in both experimental and control group showed average ability in providing bed bath and back massage.

Most of the samples, 90% (n=18) in the experimental and 90% (n=18) in the control group showed poor performance in assisting in elimination. In the experimental group 5% sample (n=1) showed average performance and 5% sample (n=1) showed good performance in assisting in elimination. In the control group 10% samples (n=1) showed average performance in assisting in elimination.

In experimental group 60% of samples (n=12) and in control group 55% of samples (n=11) showed poor performance in oral care, 35% of samples (n=7) in experimental group and 45% (n=9) in control group showed average performance and only 1 (5%) sample in experimental group showed good performance in oral care.

The table concludes that the level of ability of experimental and control group in providing oral care, bed bath and back massage, tube feeding and assisting in elimination were almost same and showed poor and average level of ability before intervention.

**TABLE – V**

**FREQUENCY AND PERCENTAGE OF EXPERIMENTAL AND CONTROL GROUP ACCORDING TO LEVEL OF ABILITY IN DIFFERENT ASPECTS OF CARE AFTER INTERVENTION**

**N=40**

Aspects of care	Level of ability															
	Excellent				Good				Average				Poor			
	Exp.		Cont.		Exp.		Cont.		Exp.		Cont.		Exp.		Cont.	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
<b>Oral care</b>	20	100.0	-	-	-	-	1	5.0	-	-	9	45.0	-	-	10	50.0
<b>Bed bath &amp; back massage</b>	20	100.0	-	-	-	-	-	-	-	-	20	100.0	-	-	-	-
<b>Tube feeding</b>	20	100.0	-	-	-	-	-	-	-	-	-	-	-	-	20	100.0
<b>Assisting in Elimination</b>	20	100.0	-	-	-	-	-	-	-	-	4	20.0	-	-	16	80.0

Exp. : experimental group

Cont. :control group

**Table V** shows Frequency and percentage of experimental and control group according to level of ability in different aspects of care after intervention.

All the samples (100%) ( n=20) in the experimental group showed excellent performance in all the four aspects of care such as oral care, bed bath and back massage, tube feeding and assisting in elimination.

Whereas in control group all the samples (100%, n=20) showed average ability in providing bed bath and back massage and poor performance in providing

tube feeding, in oral care 50% samples ( n=10) showed poor performance, 45% samples ( n=9) showed average and 5% showed good performance. In assisting in elimination 80% (n=16) of samples showed poor performance and 20% (n=4) samples showed average performance.

The table concludes that the level of ability in providing care to the patients with cerebrovascular accident in all the four aspects (oral care, bed bath and back massage, tube feeding and assisting in elimination) increased considerably in the experimental group after intervention compared to before intervention. Where as in the control group there was no difference in the level of ability when baseline and subsequent observations were compared.

**TABLE-VI**

**COMPARISON OF OVERALL MEAN ABILITY SCORE OF EXPERIMENTAL  
AND CONTROL GROUP BEFORE AND AFTER INTERVENTION AND  
LEVEL OF SIGNIFICANCE**

**N=40**

Observation	Max. Score	Experimental Group			Control Group			MD	Unpai- red ‘t’ value P<0.05 df-38
		N = 20			N = 20				
		Mean Score	Mean Score %	SD	Mean Score	Mean Score %	SD		
Before intervention	60	22.10	36.83	1.91	22.35	37.25	2.23	0.250	0.38NS
After intervention	60	57.80	96.33	0.95	22.55	37.58	2.43	35.25	60.23*

\*-Significant. NS- Not Significant.

Table value- 1.686

**Table- VI** shows Comparison of overall mean ability score of experimental and control group before and after intervention and level of significance.

Before intervention the overall mean ability score was 36.83% in the experimental group and 37.25% in the control group.

After the intervention overall mean knowledge score was 96.33% in the experimental group whereas in control group it was 37.58%.

Statistically there was a significant difference in the mean ability score between experimental group and control group after the intervention.

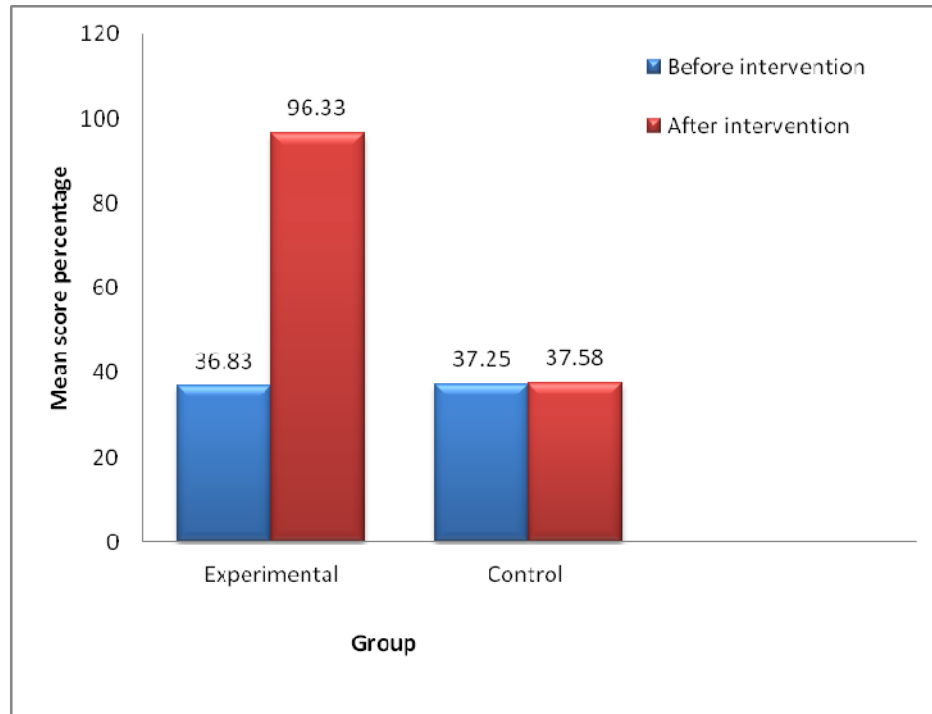
So the hypothesis (H1) that there will be a significant difference between the mean ability score of experimental & control group in meeting selected needs (oral

care, bed bath & back care, tube feeding & elimination) of patients with cerebrovascular accident after the intervention is accepted

The hypothesis (H01) there will not be any significant difference between the mean ability score of experimental & control group in meeting selected needs (oral care, bed bath & back care, tube feeding & elimination) of the patients with cerebrovascular accident before intervention is accepted.

The table concludes that there is a significant difference in the mean ability score of experimental and control group in provision of care for patients with cerebrovascular accident before and after intervention.

**Figure 2 presents overall mean ability score of experimental and control group regarding provision of care before and after intervention in percentage**



**Figure 2** Overall mean ability score of experimental and control group regarding provision of care before and after intervention in percentage.



**TABLE-VII**

**COMPARISON OF MEAN ABILITY SCORE OF EXPERIMENTAL AND  
CONTROL GROUP IN DIFFERENT ASPECTS OF CARE BEFORE  
INTERVENTION AND LEVEL OF SIGNIFICANCE**

**N=40**

Aspects of care	Max Score	Experimental Group			Control Group			MD	Unpaired 't' value P<0.05 df-38
		Mean Score	Mean Score %	SD	Mean Score	Mean Score %	SD		
<b>Oral care</b>	12	4.600	38.33	0.82	4.500	37.50	0.60	0.10	1.438 NS
<b>Bed bath and back massage</b>	17	8.10	47.65	.640	8.200	48.24	0.61	0.10	.503 NS
<b>Tube feeding</b>	18	4.350	24.17	0.67	4.200	23.33	0.83	0.33	0.627 NS
<b>Assisting in elimination</b>	13	5.050	38.85	0.82	5.20	40.00	0.51	0.15	0.621 NS

\*-Significant. NS- Not Significant.

Table value- 1.686

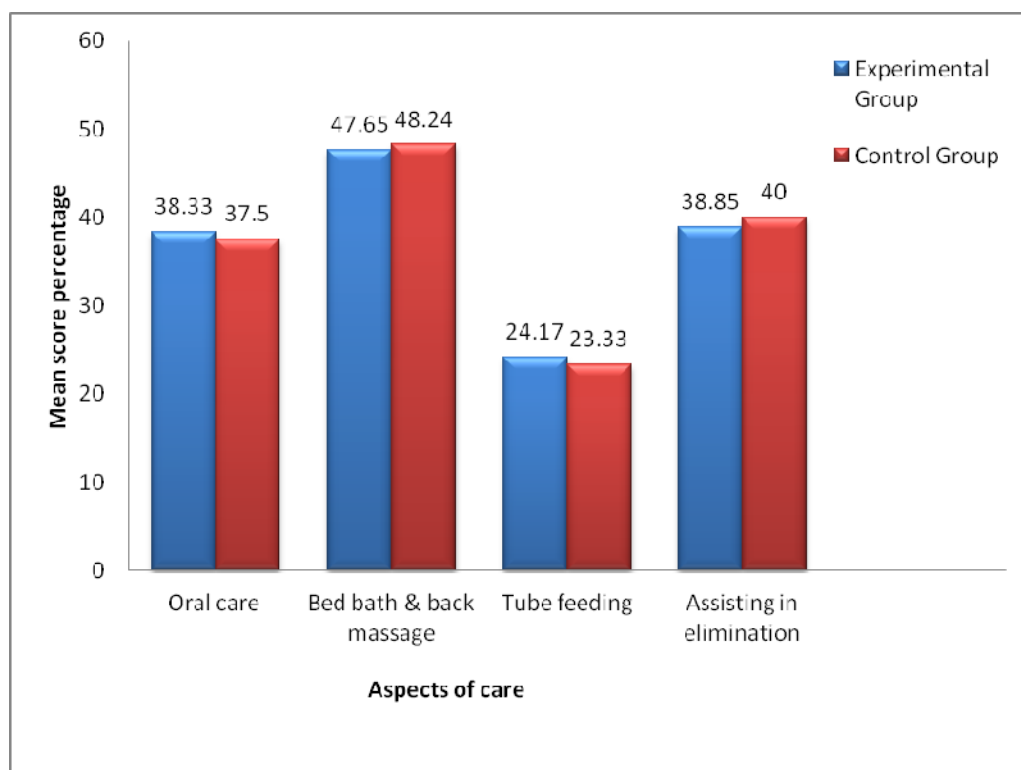
**Table –VII** presents mean ability score of experimental and control group in different aspects of care before intervention and level of significance.

In experimental group the mean ability score ranged from 24.17% to 38.85% in the four aspects of care before intervention. The highest score of ability was seen with regard to bed bath and back massage(mean= 47.65%) and the lowest score of ability was seen with regard to tube feeding was (mean= 24.17%, for oral care and for assisting in elimination the mean ability score was 38.85% and 38.88% respectively.

Control group also showed a similar pattern of mean ability score ranging from 23.33% to 48.24% in the aspects of oral care, bed bath and back massage, tube feeding and assisting in elimination before intervention. The highest score of ability was seen with regard to bed bath and back massage (mean= 48.24% and the lowest score of ability was seen with regard to tube feeding was 23.33% the mean ability score for oral care (mean = 37.50%) and for assisting in elimination was 40%

Statistically no significant difference was found in the mean ability score of oral care, bed bath and back massage, tube feeding and assisting in elimination in control and experimental group.

**Figure 3 Mean ability score of experimental and control group regarding different aspects of care before intervention in percentage.**



**Figure 3** Mean ability score of experimental and control group regarding different aspects of care before intervention in percentage

**TABLE VIII**

**COMPARISON OF MEAN ABILITY SCORE OF EXPERIMENTAL AND CONTROL GROUP IN DIFFERENT ASPECTS OF CARE AFTER INTERVENTION AND LEVEL OF SIGNIFICANCE**

**N=40**

Aspects of care	Max Score	Experimental Group			Control Group			MD	Unpaired 't' value P<0.05 df-38
		Mean Score	Mean Score %	SD	Mean Score	Mean Score %	SD		
<b>Oral care</b>	12	11.65	97.08	0.48	4.550	37.92	0.75	7.10	35.15*
<b>Bed bath and back massage</b>	17	16.65	97.94	0.48	8.150	47.94	0.67	8.50	45.78*
<b>Tube feeding</b>	18	17.00	94.44	0.56	4.250	23.61	0.78	12.31	58.99*
<b>Assisting in elimination</b>	13	12.50	96.15	0.69	5.350	41.15	0.93	7.150	30.02*

\*- Significant. NS- Not Significant.

Table value- 1.686

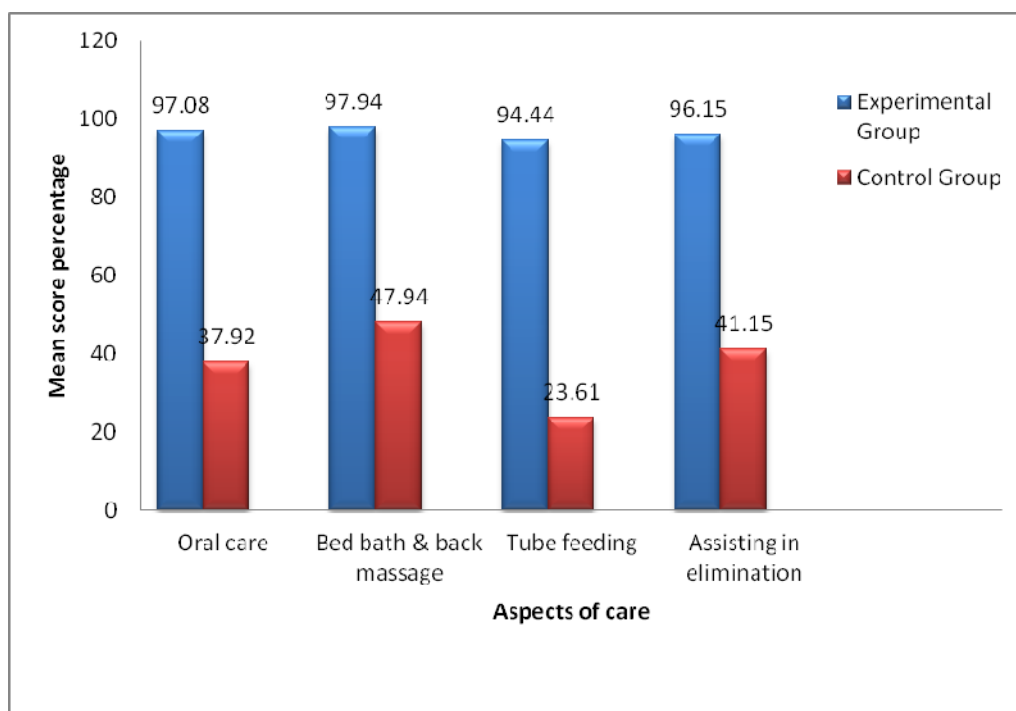
**Table VIII** presents the mean ability score of experimental and control group in different aspects of care after intervention and level of significance.

The experimental group showed a high mean ability score of 97.94% in the performance of bed bath and back massage after the intervention. The mean ability score ranged from 94.44% to 97.94%. The mean ability scores in other areas -tube feeding, assisting in elimination, oral care were 94.44%, 96.15%, and 97.08% respectively.

In the control group the mean score in all the four aspects of care remained the same as for the baseline observation, in the subsequent observation after one week.

Statistically the difference between the experimental and control group observed in all the four aspects of care was significant ( oral care  $t= 35.15$  , bed bath and back massage,  $t= 45.78$ , tube feeding  $t= 58.99$ , assisting in elimination  $t= 30.02$ )where

**Figure 4 -Mean ability score of experimental and control group regarding different aspects of care after intervention in percentage.**



**Figure 3** Mean ability score of experimental and control group regarding different aspects of care after intervention in percentage

**SECTION 3 – ASSOCIATION OF SELECTED DEMOGRAPHIC  
VARIABLES WITH OVERALL LEVEL OF ABILITY IN PROVIDING CARE**

**TABLE – IX**

**ASSOCIATION OF SELECTED DEMOGRAPHIC VARIABLES WITH  
OVERALL LEVEL OF ABILITY IN PROVIDING CARE BEFORE  
INTERVENTION**

**N=40**

SI. No	Characteristics	Poor		Average		$\chi^2$ value	$\chi^2$ table value $p < 0.05$
		F	%	F	%		
1.	<b>Age</b>						
	• 20 – 30 Yrs	3	7.50	0	0.00	4.42 NS	Df=3 7.815
	• 31 – 40 Yrs	8	20.00	2	5.00		
	• 41 – 50 Yrs	21	52.50	3	7.50		
	• 51 – 60 Yrs	3	7.50	0	0.00		
2.	<b>Education</b>						
	• High school	19	47.5	1	2.50	2.611NS	Df=2 5.991
	• Higher Secondary	11	27.5	2	5.00		
	• graduate	5	12.5	2	5.00		
3.	<b>Occupation</b>						
	• Self employed	3	7.5	-	-	5.559NS	Df=3 7.815
	• Private	5	12.5	-	-		
	• Government	1	2.5	-	-		
	• Un employed	26	65.0	5	12.5		
4.	<b>Relationship with patient</b>						
	• Wife	9	22.5	2	5.0	1.053NS	Df=3 7.815
	• Daughter	20	50	2	5.0		
	• Sibling	3	7.5	1	2.5		
	• Others	3	7.5	-	-		

\*-Significant.

NS- Not Significant.

**Table – IX** presents the association between selected demographic variables and overall level of ability in providing care before intervention.

The table shows that there was no significant association between age, education, occupation and relationship with the patient and level of ability in providing care before intervention.



# **DISCUSSION**

## CHAPTER V

### DISCUSSION

In the discussion section, the researcher draws conclusions about the meaning and implications of the finding. This section tries to unravel what the results mean, why things turned out the way they did and how the results can be used in practice.

The study focused on assessing the effectiveness of participation of patient's attendants in care, on their ability in meeting the selected care needs of patients with cerebrovascular accident. This chapter presents the main findings and its discussion.

#### **Personal characteristics of the experimental and control group**

**Table I-** The data shows most of the attendants were aged between 41- 50 yrs, females, educated and unemployed.

**Table II-** Explains frequency and percentage distribution of samples according to the personal characteristics. The findings revealed that in both the group, all the samples stayed with the patients for more than 5 weeks. 60% of the samples in the experimental group and 50% of the samples in the control group were daughters. All the caregivers (100%) had not received any instructions regarding care of cerebrovascular accident patients from anywhere.

The present study findings are also supported by a study done earlier by **Elaine Wittenberg (2001)** on the ability and skill of caregivers regarding the care of the hospitalised patient. The result showed that many family caregivers did not have the necessary skills and ability to provide sustained care for a person with chronic illness, so they lacked confidence and felt unprepared. Caregivers reported that they received little guidance from health providers, that they did not know how to assume caregivers role, and were not familiar with the type and amount of care needed, and also how to access and utilize resources.

## **Level of ability of experimental and control group**

**Tables III, IV, V, VI, VII ,VIII & IX** explain the level of ability to provide selected care needs before and after intervention.

**Table III** explains the ability of experimental and control group to provide overall care before and after intervention. Before intervention 85 % of samples in experimental and 90% of samples in control group showed poor level of ability and 15% of samples in experimental group and 10% of samples in control group showed average level of ability in providing care. After intervention 100% of samples in the experimental group showed excellent level of ability in providing care whereas the control group remained in the same pre-intervention level of ability.

The present study revealed that, the level of ability in meeting the selected care needs was improved in the experimental group who participated in care, whereas in the control group there was no improvement in the level of ability in providing care.

**Table IV** shows the level of ability of experimental and control group in different aspects of care like oral care, bed bath and back massage, tube feeding and assisting in elimination before intervention. Most of the samples showed poor ability in oral care, tube feeding and assisting in elimination and all samples in experimental and control group showed average ability in bed bath and back massage.

**Table V** shows the level of ability of the experimental and control group in different aspects of care like oral care, bed bath and back massage, tube feeding and assisting in elimination after intervention. The table revealed that the experimental group had a significant increase in the level of ability in different aspect of care after the intervention but the control group showed the same pre-intervention ability status.

**Table VI** shows the comparison of overall mean ability score of experimental and control group before and after intervention and its level of significance. Here the data suggest that the mean ability score of experimental and control group are almost similar before intervention (mean score of experimental group was 36.83% and control group 37.25%). After intervention, mean score of experimental group was

higher than the mean score of control group. So, the hypothesis (H1), there is significant difference in mean ability score of experimental and control group in meeting selected needs (oral care, bed bath and back massage, tube feeding and assisting in elimination) of patients with Cerebrovascular Accident after intervention is accepted.

Present study findings are also supported by a study done by **Janie Kayser (1998)** to assess the effectiveness of a training programme on the ability and caring ability of the family caregivers of AIDS patients. The result revealed that the experimental group had a significantly higher level of ability and caring ability after undergoing training programme.

**Table VII** presents comparison of mean ability score of experimental and control group in different aspects of care before intervention and level of significance. Both the groups demonstrated a low ability score in all the four aspects of care. In oral care the experimental group showed 38.33% and the control group showed 37.50%. In bed bath and back massage the experimental group showed 47.65% and the control group showed 48.24%. In tube feeding the experimental group showed 24.17% and the control group showed 23.33%. In assisting in elimination the experimental group showed mean ability score of 38.85% and the control group showed 40%.

It was concluded from the table that no significant difference was found in level of ability in providing care in different aspects like oral care, bed bath and back massage, tube feeding and assisting in elimination between experimental and control group before intervention.

**Table VIII** presents comparison of mean ability score of experimental and control group in different aspects of care after intervention and level of significance. The experimental group showed a high mean ability score ranged from 94.44% to 97.08% in different aspects of care after intervention. But the control group showed a similar low mean ability score pattern.

Study results showed that there was a significant difference in the mean ability score in all the four areas among experimental group compared to control group after intervention.

### **Association of study variables with selected demographic variables**

**Table IX** presents association between selected demographic variables and overall level of ability in providing care before intervention. The present study showed that there was no significant association between age, education, occupation and relationship with the patient and level of ability in providing care before intervention.

Present study findings are supported by the study done by **Mohammed Shinde (2009)**, quasi-experimental study to assess the effectiveness of demonstration regarding feeding of hemiplegia patients, among caregivers. The result showed no significant relationship of feeding pattern with regard to age, sex, education, occupation and marital status.

**SUMMARY,  
CONCLUSION,  
IMPLICATION AND  
RECOMMENDATIONS**

## **CHAPTER VI**

### **SUMMARY, CONCLUSION, IMPLICATION AND RECOMMENDATIONS**

In this chapter, summary of the study, summary of the findings, Conclusions and Recommendations are presented.

#### **SUMMARY OF THE STUDY**

The study was done to assess the effectiveness of participation of patient's attendants in care, on their ability in meeting the selected care needs of the patients with Cerebrovascular accident. A quasi experimental pretest and post test control group design was used. The study was conducted in a selected Government hospital in Manjeri, Kerala. The sample size consisted of 40 attendants of patients with cerebrovascular accident (20 samples in control group and 20samples in experimental group) selected by convenient sampling method.

The conceptual frame work of this study was based on Dorothy. E. Johnson's behavioral system theory (1980). Prior to intervention the demographic data were collected and a pre test was given individually to both the experimental and the control group by assessing their ability in meeting selected care needs (oral care, bed bath and back massage, tube feeding, assisting in elimination) using a checklist. In the experimental group the technique of meeting selected care needs – oral care, bed bath and back massage, tube feeding, assisting in elimination were demonstrated and participated in the care of the patient with cerebrovascular accident and corrections and encouragement were given for their participation. After one week their ability in providing care was re-assessed by using observation check-list. No intervention was given for the control group after pre test, and subsequent observation was done after 1 week. The data analysis and interpretation were done by using descriptive and inferential statistics.

## **SUMMARY OF THE FINDINGS**

### **Demographic data**

In both the groups, most of the caregivers were aged between 30-50 yrs, were females, educated and unemployed. All the caregivers (100%) stayed with the patient for more than 05 weeks. Most of the caregivers (50-60%) were daughters. None of the caregivers have received any instructions regarding care of cerebrovascular accident patients.

### **Level of ability of experimental and control group in selected aspects of care**

#### **Oral care**

Before the intervention in the experimental group majority (60%) of the samples showed poor ability in providing oral care. After intervention all the samples (100%, n=20) showed excellent performance in providing oral care. Whereas the control group showed the same ability in providing oral care in the baseline and subsequent observation.

#### **Bed bath and back massage**

Before the intervention in the experimental group all the 20 samples (100%) showed average level of ability in providing bed bath and back massage. After intervention all the 20 samples (100%) showed excellent level of ability in providing bed bath and back massage. Whereas the control groups all the 20 samples (100%) showed average performance in the baseline and subsequent observation.

#### **Tube feeding**

Before the intervention in the experimental group all the 20 samples (100%) showed poor performance in providing tube feeding. After intervention all the 20 samples (100%) showed excellent performance in providing tube feeding. Whereas in the control group all the 20 samples (100%) showed poor performance in providing tube feeding in the baseline and subsequent observation.



### **Assisting in elimination**

Before the intervention in the experimental group majority (90%) of the samples (n=18) showed poor ability in assisting in elimination. After intervention all the 20 samples (100%) showed excellent performance in Assisting in elimination. Whereas in the control group majority (90%) of the samples (n=18) showed poor ability in assisting in elimination, 2 samples (10%) showed average ability in assisting in elimination in the baseline observation. In the subsequent observation 16 samples (80%) showed poor performance and 4 samples (20%) showed average ability in assisting in elimination.

### **Overall level of ability to provide care**

In the experimental group before intervention majority (85%) of the samples (n=17) showed poor level of ability, 3 samples (15%) showed average level of ability in providing care. After intervention all 20 samples (100%) showed excellent level of ability in providing care. In the control group 18 samples showed poor level of ability and 2 samples showed average level of ability in providing care in the baseline observation and In the subsequent observation 16 samples (80% ) showed poor performance and 4 samples (20%) showed average ability in providing care.

### **Significant findings**

- There was a significant improvement in the ability to provide oral care, bed bath and back massage, tube feeding and assisting in elimination in the experimental group compared to the control group after the intervention
- There was a significant improvement in the over all level of ability of the experimental group compared to the control group after the intervention.
- There was a significant difference between the mean ability score of experimental and control group after intervention ( $t = 60.232$  after intervention as the obtained value was greater than table value (1.686) at 38 degree of freedom). Hence the research hypothesis H1 is accepted at 0.05 level of significance.

## **CONCLUSION**

The findings of the study conclude that the participation of patient's attendants in care has an effect on ability of patient attendants in providing care. It improves their ability in providing care, thereby ensures the safety of patients and minimizes the risk of complications.

## **IMPLICATION**

The findings of the study will have implication for Nursing Education, Nursing Service, Nursing Administration and Nursing Research.

### **Nursing practice**

Providing care to the patient is primarily a nurse's responsibility. Because of the shortage of nursing staff in the hospitals, the nurses get less time to provide care for each patient. When the caregivers are involved in providing care for the patient the nurses should ensure that the caregivers are having adequate knowledge and skill in providing care and thus ensure the safety of the patients. The findings of the study clearly proves that the caregivers are poorly prepared for providing care for the Cerebro-Vascular accident patients and majority of them lack professional guidance and supervision. So the nurses should be more vigilant in educating and supervising the caregivers, in order to avoid the unwanted complications especially in situations like Cerebrovascular patients who will be discharged. The nurses should make sure that the caregivers are competent enough in dealing with the patients who are completely or partially dependent on others for their needs.

### **Nursing education**

The nursing staff and students should be taught about the importance of educating and supervising the caregivers about care of patients with Cerebrovascular accident. The nurse educator should create awareness regarding oral care, bed bath and back massage, tube feeding and assisting in elimination and supervise the caregivers who are providing care for their relatives. It will improve the nutritional status and quality of life of the patients.

### **Nursing administration**

Nurse administrator should be vigilant in organizing and coordinating training programmes for the caregivers who are providing care to their relatives. She should ensure that the staff nurses are providing adequate instructions and guidance regarding care and no caregivers should be permitted to provide care like tube feeding to their relative without undergoing adequate training. She should coordinate special training programme for those who are in home settings through the hospitals community outlets.

### **Nursing research**

This is only an initial investigation to assess the effectiveness of providing education to the care givers regarding care of patients with Cerebro-Vascular accident. There is a need for intensive research in the area of caregiver's knowledge, preparedness and their physical and psychological stress in rendering patient care and thereby formulate plans for providing better caregivers support services.

### **RECOMMENDATIONS**

1. A similar study can be replicated on a large population.
2. A study can be conducted among staff nurses to assess their knowledge and technique regarding care of patient with Cerebro-Vascular accident in the aspects of oral care, bed bath and back massage, tube feeding and assisting in elimination.
3. A study can be conducted to assess the preparedness of the caregivers in caring their diseased or hospitalized relatives.

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# APPENDICES

## APPENDIX – I

### LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY

To

The medical superintendent  
Govt. General Hospital  
Manjeri  
Kerala

Respected Sir / Madam

**Sub:** Letter requesting permission for conducting the study.

30104602 is a post graduate nursing student of our institution. She has selected the below mentioned topic for his research project to be submitted to Dr.MGR Medical University of Health Science as a partial fulfillment of Master Nursing degree.

**“A study to assess the effectiveness of participation of patient’s attendants in care, on their ability in meeting selected needs of the patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala”.**

Regarding this project, she is in need of your esteemed help and co-operation as she is interested in conducting a study of her project in your hospital. I request you to kindly permit her to conduct the proposed study and provide her the necessary facilities.

The student will furnish further details of the study if required personally. Please do the needful and oblige.

Thanking You

Yours Faithfully,

Place:

Date:

Principal

E1/1053/2011

Govt. General Hospital, Manjeri  
Dated 11.08.2011

### CERTIFICATE

This is to certify that Smt. Divya. C, M.Sc. Nursing Student of RVS  
College of Nursing, Coimbatore has undergone research training, as a special  
case, for one week pilot study and six week main research study at this Govt.  
General Hospital, Manjeri for the period from 23.08.2011 to 07.10.2011, as per  
Government letter No: 16693/C3/2011/H&FWD dtd 28.05.2011. She has  
successfully completed the training as on 07.10.2011



To

Smt. Divya. C

*Handwritten signature:* dhanu  
Superintendent  
Govt. General Hospital, Manjeri  
Panakkad Sayyed Muhammedali  
Shihab Thangal Memorial  
Govt. General Hospital, MANJERI  
12/10/2011

## APPENDIX – II

### PERMISSION LETTER FOR CONTENT VALIDITY

From

30104602 II Year M.Sc. Nursing  
R.V.S College of Nursing,  
R.V.S Institute of Health Sciences,  
Sulur, Trichy road, Coimbatore.

To

Through the Principal

Respected Madam / Sir

**Sub:** Request for opinions and suggestions of experts for establishing content validity of research tool.

I am a Master of Nursing student in RVS College of Nursing, Sulur in the Speciality of Medical Surgical nursing. As per the requirement for the partial fulfillment of the Master of Nursing degree under the Tamil Nadu Dr.MGR Medical University, I have selected the following topic for dissertation.

**“A study to assess the effectiveness of participation of patient’s attendants in care, on their ability in meeting selected needs of the patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala”.**

Approved by the Dissertation I humbly request you to kindly validate the tool and give your valuable suggestion.

Thanking You

Yours sincerely

Enclosures: 1. Statement of the problem  
2. Objectives of the study  
3. Hypothesis of the study  
4. Research tool  
5. Criteria rating for validation  
6. Content validation certificate.

30104602

## APPENDIX – III

### CERTIFICATE OF CONTENT VALIDITY

This is to certify that tool developed by 30104602, M.Sc. Nsg II year student, R.V.S. College of Nursing, Sulur, Coimbatore to collect data on the problem.

**“A study to assess the effectiveness of participation of patient’s attendants in care, on their ability in meeting selected needs of the patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala”** is validated by the undersigned and she can proceed with this tool to conduct the main study.

Name and Address :

Signature :

Seal :

Date :

## APPENDIX – IV

### CRITERIA RATING SCALE FOR TOOL VALIDATION

Kindly go through this tool; please give your views regarding scoring, content, language and practicability.

Interpretation of the scale : Column I – Meets the criteria; Column II – Partially meets the criteria; Column III – Doesn't meet the criteria

S.No	Criteria	I	II	III	Remarks
1.	<b>Scoring</b>				
	- Appropriateness				
	- Adequacy				
	- Accuracy				
	- Clarity				
	- Simplicity				
2.	<b>Content</b>				
	- Organization				
	a) Logical sequence				
	b) Continuity				
	- Adequacy				
	- Appropriateness				
	- Relevance				
3.	<b>Language</b>				
	- Appropriateness				
	- Clarity				
	- Simplicity				
	- Concise				
	- Precision				

4.	<b>Practicability</b>				
	- Is it easy to score				
	- Precisely measure the skill				
	- Utility				

**Suggestions:**

**Signature**

**Name:**

**Designation:**



**APPENDIX - V**  
**REQUISITION LETTER FOR CO-GUIDE**

**From**

**30104602**

Second year M.Sc. Nursing,  
RVS College Of Nursing,  
Sulur, Coimbatore.

**To**

**Dr.U.M. Natarajan, MD,C.DIAB**

Professor(Rtd), CMCH, Coimbatore,  
Consultant Physician & Cardiometabolologist,  
R.V.S Multi Speciality Hospital,  
Sulur, Coimbatore-641402.

Through the Principal

Respected sir,

**Sub : Request for Co-Guide**

I wish to state that I am 30104602, M.Sc. (N) II year student of RVS College of Nursing. I have selected the below mentioned topic for dissertation as a partial fulfillment of the Master of Nursing Degree to the Tamil Nadu Dr. M.G.R Medical university.

**“A study to assess the effectiveness of participation of patient’s attendants in care, on their ability in meeting selected needs of the patients with Cerebrovascular Accident in a selected hospital in Manjeri at Kerala”.**

Regarding this I am in need of your valuable help and cooperation by providing services to be a Co-Guide for my study.

I humbly request your highness to consider the same and do the needful.

Thanking you,

Yours sincerely

**(30104602)**

**APPENDIX - VI**  
**INTERVIEW SCHEDULE**

**INTRODUCTION:**

Most of the patients have families that are providing some amount of care and support. In case of patients with CVA this type of informal care is very important. Nurses have to pay attention for the safety of the patients while the family care givers are providing care to the patient. Education is essential for the smooth transition from hospital to home for both persons with stroke and their caregivers.

**PURPOSE:**

The purpose of this observation is to find out the ability of the patient attendants in providing care for the patients with cerebrovascular accident. (The researcher will explain the nature of the study to the patient's attendants & clear the doubts of patient's attendants).

**DEMOGRAPHIC DATA**

1. Code No :

2. Age :

- |                       |                          |
|-----------------------|--------------------------|
| a. 20 - 30 years      | <input type="checkbox"/> |
| b. 30 - 40 years      | <input type="checkbox"/> |
| c. 40 - 50 years      | <input type="checkbox"/> |
| d. 50 - 60 years      | <input type="checkbox"/> |
| e. More than 60 years | <input type="checkbox"/> |

3. Sex :

- |           |                          |
|-----------|--------------------------|
| a. Male   | <input type="checkbox"/> |
| b. Female | <input type="checkbox"/> |

4. Education :

- |                            |                          |
|----------------------------|--------------------------|
| a. No schooling            | <input type="checkbox"/> |
| b. Primary School          | <input type="checkbox"/> |
| c. High school             | <input type="checkbox"/> |
| d. Higher Secondary school | <input type="checkbox"/> |
| e. Graduate                | <input type="checkbox"/> |

5. Occupation:

- a. Self employed ☐
- b. Private employee ☐
- c. Government Employee ☐
- d. Unemployed ☐

6. Relationship with the patient.

- a. Wife ☐
- b. Husband ☐
- c. Son ☐
- d. Daughter ☐
- e. Sibling ☐
- f. Parents ☐
- g. Others ☐

7. Period of stay with the patient

- a. < 1 week ☐
- b. 1 week – 3 weeks ☐
- c. 3 weeks – 5 week ☐
- d. > 5 weeks ☐

9. Received any instruction regarding care of patients with CVA

Yes ☐ No ☐

If Yes source of instruction

- Doctor ☐
- Nurse ☐
- Other health care professionals ☐
- Others ☐

## OBSERVATION CHECK LIST – I

### TO ASSESS THE ORAL CARE TECHNIQUES:

The Group:

ID No:

The presence or absence of the below mentioned items are marked by using (✓) or (X) respectively

Sl. No	Steps	Pre intervention observation O <sub>1</sub> (✓) or (X)	Post intervention observation O <sub>2</sub> (✓) or (X)
1	Get all the required articles at the bedside		
2	Inform the patient about the oral care		
3	Position the client in fowlers position		
4	Place the towel under the head & over the chest to protect the linen and the client from wetness.		
5	Place kidney tray close to the mouth		
6	Ask the client to open the mouth		
7	Clean the teeth (outer side, inner side, right & left side & the chewing surface) with a cleaning solution or tooth paste.		
8	Clean the tongue using gauze piece.		
9	Help the patient to rinse the mouth		
10	Wipe the lips and face with towel		
11	Remove and clean oral hygiene materials		
12	Wash hands		

## OBSERVATION CHECK LIST – II

### TO ASSESS THE BED BATH AND BACK MASSAGE:

The Group:

ID No:

S.No	Steps	Pre intervention observation (✓) or (X)	Post intervention observation (✓) or (X)
1	Clean and collect all the articles at the bed side		
2	Tell the patient about bath		
3	Provide privacy by closing the door		
4	Position the client in supine position		
5	Remove the personal clothing and cover patient with bath blanket		
6	Assist the client to wash the areas in the following sequence face, neck, farthest arm, near arm, chest, abdomen, back, farthest leg, near leg and perineum.		
7	Rinse the soap from the washed areas and dries the washed areas thoroughly		
8	Turn the client to side lying position		
9	Bath back and buttock		
10	<b><i>Provide back massage</i></b>		
	a) Warm the hand and apply powder		
	b) Distribute the powder across the surface of the back with long strokes from sacrum to the shoulders and back again.		
	c) Administer firmer strokes over bony prominences		
	d) Knead areas that are especially affected by the pressure of body weight against mattress		
11	Reposition the client on his back		
12	Replaces personal clothing's and changes bed linen		
13	Remove the wash basin & soiled linen		
14	Wash hands		

**OBSERVATION CHECK LIST – III**  
**TO ASSESS THE TECHNIQUE OF FEEDING:**

The Group:

ID No:

S.No	Steps	Pre intervention observation (✓) or (X)	Post intervention observation (✓) or (X)
	<b>TUBE FEEDING</b>		
1	Get all the required articles at the bed side		
2	Keep the feed ready		
3	Inform the patient about feeding		
4	Position the patient in semi fowlers position		
5	Cover the patient chest with a clean cloth		
6	Wash hands		
7	Pinch the tube end with one hand and remove the closure with the other hand		
8	Connect the syringe to the nasogastric tube.		
9	Place the syringe parallel and aspirate gastric juice		
10	Remove the plunger and pour feed and keep the syringe vertically above the patient's chest level (30-45cm)		
11	Release pinching and allow feed to flow		
12	Add more feeds before the syringe empties		
13	Rinse the tube with water		
14	Pinch the tube, remove the syringe and apply closure tightly		
15	Wash the utensils and keep it clean		
16	Wash hands		
17	Record the time and amount of feed given		
18	Keep the patient in semi fowlers position for 30 more minutes		

## OBSERVATION CHECK LIST – IV

### TO ASSESS THE TECHNIQUE OF ASSISTING ELIMINATION:

The Group:

ID No:

S.No	Steps	Pre intervention observation (✓) or (X)	Post intervention observation (✓) or (X)
	<b>Placing bed pan</b>		
1	Explain the patient about the positioning		
2	Provide privacy to the patient by closing the door or by placing the screen.		
3	Lower the head end of the bed to the lowest position tolerated by the patient		
4	Roll the person on to the side where he is most comfortable		
5	Place the bedpan against the buttocks		
6	Ask the patient to roll back, ensuring that the bedpan is under the buttocks		
7	Elevate the persons heads on the bed in to more of a sitting position		
	<b>Removing the bed pan</b>		
8	Lower the head end of the bed to a flat position		
9	Ask the person / roll the person to roll over so that to remove the bed pan		
10	Grab the pan with one hand and carefully remove it from the person's buttock		
11	Cleanse the person's buttocks or genital area		
12	Clean bedpan with disinfectant		
13	Wash hands		

**APPENDIX – VII**

**LESSON PLAN ON  
ORAL CARE, BED BATH AND BACK  
MASSAGE, NASOGASTRIC TUBE  
FEEDING AND ASSISTING IN  
ELIMINATION**



### **LESSON PLAN ON ORAL CARE**

Topic	:	oral care
Number of samples	:	1 individual at a time
Duration	:	15 to 20 minutes
Place	:	Ward
Method of teaching	:	Discussion cum demonstration

#### **Central Objective:**

On the completion of the demonstration the participants are able to understand about oral care , develop a positive attitude regarding oral care and develop ability to provide oral care to the patients with the application of correct techniques, in both hospital & home settings.

#### **Specific Objective:**

At the end of the class the care givers are able to

1. List down the purposes of oral care
2. Explain the preparation for oral care
3. Demonstrate the techniques of oral care effectively
4. Understand the after care of patient and articles

Specific Objective	Content	Teaching & Learning activity	A V Aids
<p>Introduces the topic</p> <p>List down the purposes of oral care</p>	<p><b>INTRODUCTION</b></p> <p>All of us are cleaning our mouth daily. We need to clean our mouth to prevent bad odour, removing micro organisms , etc. The patients also need to maintain the cleanliness of their mouth. Because of their inability to perform themselves they need other person's help for this purpose. So it is your responsibility to keep your patients mouth clean.</p> <p><b>Purposes of oral care</b></p> <ol style="list-style-type: none"> <li>1. Cleanse the teeth and mouth.</li> <li>2. Maintain oral moisture and integrity of the tissue.</li> <li>3. Prevent oral infection.</li> <li>4. Relieve discomfort from inflamed lesions.</li> </ol> <p><b>Preparation of the articles</b></p> <p><u>Articles needed for the oral care; A tray contains the following,</u></p> <ul style="list-style-type: none"> <li>• Tooth brush</li> </ul>	<p>Teacher introduces the topic &amp; group listen.</p> <p>Explains the purposes of oral care</p>	<p>- Showing the articles needed for oral care.</p>

<p>Explain the preparation for oral care</p> <p>Demonstrate the techniques of oral care effectively</p>	<ul style="list-style-type: none"> <li>• Tooth paste/ cleansing solution</li> <li>• Emesis basin</li> <li>• Disposable gloves (optional)</li> <li>• Cup with cool water</li> <li>• Towel</li> <li>• Gauze pieces</li> </ul> <p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>- Arrange all articles needed for oral care at bedside.</li> <li>- Explain the procedure to the Patient.</li> <li>- Position the patient in fowlers position</li> <li>- Perform hand hygiene</li> </ul> <p><b><u>Techniques of oral care</u></b></p> <ol style="list-style-type: none"> <li>1. Position the client in fowlers position.</li> <li>2. Place the towel under the head &amp; over the chest</li> <li>3. to protect the linen and the client from wetness.</li> <li>4. Place kidney emesis basin close to the mouth to receive the waste</li> </ol>	<p>Shows the articles and explain</p> <p>Explain and show preparations for oral care</p> <p>Q:why the patient is maintained in fowlers position for oral care ?</p> <p>Q:why we need to perform hand hygiene.</p> <p>Demonstrates the techniques&amp; explains rationale, the group observes</p>	-
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	<p>water and to protect the client from dampness</p> <ol style="list-style-type: none"> <li>5. Ask the client to open the mouth to facilitate cleaning</li> <li>6. Clean the teeth (outer side, right &amp; left side, inner side &amp; the chewing surface -extending from gum to enamel) with a cleaning solution or tooth paste. To ensure thorough cleaning</li> <li>7. Clean the tongue using gauze piece</li> <li>8. Help the patient to rinse the mouth. Rinsing helps to cleanse the debris from the mouth</li> <li>9. Wipe the lips and face with towel</li> </ol> <p><b>After care</b></p> <ul style="list-style-type: none"> <li>- Apply glycerin or any other emollient on the cracked lips</li> <li>- Remove the towel, basin , and other oral hygiene materials</li> </ul>		-
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Understand the after care of patient and articles.	<ul style="list-style-type: none"> <li>- Make the patient comfortable.</li> <li>- Clean all the articles</li> <li>- Wash hands</li> </ul> <p><b>Summary:</b></p> <p>Today in this session we have discussed regarding the oral care, its purposes, preparation of articles, preparation of patient, techniques of providing oral care after care of patient and articles.</p> <p><b>Conclusion:</b></p> <p>We have seen in detail about the oral care. Oral care is very important incase of patients especially those who are receiving feeding through Ryle's tube. Because the patients may take breath through mouth so lack of oral hygiene may lead to infections.</p>	<p>Q:why we need to apply glycerin over the lips ?</p> <p>Q: The articles should be washed &amp; kept clean. Why?</p> <p>Teacher summarizes the topic and patient attendant actively listens</p> <p>Questions&amp; Answers</p> <p>Teacher concludes the topic and patient attendants listen</p>	
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### **LESSON PLAN**

Topic	:	Bed bath and back massage
Number of samples	:	1 individual at a time
Duration	:	20 to 30 minutes
Place	:	Ward
Method of teaching	:	Discussion cum demonstration

#### **Central Objective:**

On the completion of the demonstration the participants are able to understand regarding the technique of bed bath and back massage, develop a positive attitude towards bed bath and back massage and develop ability to give bed bath and back massage with the application of knowledge and correct techniques, in both hospital & home settings.

#### **Specific Objective:**

At the end of the class the care givers are able to

1. Identify the purposes of bed bath and back massage.
2. List down the articles needed for bed bath and back massage
3. Understand the preparation of patient for bed bath and back massage
4. Demonstrate the techniques of bed bath and back massage effectively.

Specific Objective	Content	Teaching & Learning activity	A V Aids
<p>Introduces the topic</p> <p>Identify the purposes of bed bath and back massage.</p>	<p><b>Introduction</b></p> <p>All of us are taking bath daily to maintain our cleanliness. Due to the illness and disability the patients may not be able to maintain their cleanliness and also due to bedridden status they experience difficulty in moving in the bed so they are more prone to skin breakdown. So it is your responsibility to keep your patients neat, clean and free of complication.</p> <p><b>Purposes of bed bath and back massage</b></p> <ol style="list-style-type: none"> <li>1. Cleanse the body</li> <li>2. Refresh the client</li> <li>3. Stimulate the circulation</li> <li>4. Exercise muscles and joints</li> <li>5. Provide tactile stimulation</li> <li>6. Promote comfort and relaxation</li> <li>7. Improve self concept</li> </ol>	<p>Teacher introduces the topic &amp; group listen.</p> <p>Q: why we need to give bath to the patient?</p>	

<p>List down the articles needed for bed bath and back massage</p>	<p><b>Preparation of the articles</b></p> <p><u>Articles needed for the bed bath and back massage contains the following,</u></p> <ul style="list-style-type: none"> <li>• Wash basin</li> <li>• Soap and soap dish</li> <li>• Wash cloths</li> <li>• Bath blanket</li> <li>• Gown or pajamas</li> <li>• Bed linen</li> <li>• Towel (2)</li> <li>• Bucket</li> <li>• Personal hygiene supplies(deodorant, lotion, powder, and so on )</li> </ul> <p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>- Arrange all articles needed for bed bath and back massage at beside.</li> <li>- Explain the procedure to the Patient.</li> <li>- Bring the patient to the edge of the bed and Position the</li> </ul>	<p>Shows the articles and explaining</p> <p>Q: what are the articles needed for bed bath and back massage ?</p> <p>Explains and shows preparations for bed bath and back massage</p> <p>Q: what is the need for explaining the procedure to the patient?</p>	<p>-Showing the articles needed for bath and back massage</p>
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<p>Understand the preparation of patient</p>	<p>patient in comfortable position</p> <ul style="list-style-type: none"> <li>- Provide privacy by keeping the curtains around the bed and close the door if possible.</li> <li>- Offer urinal or bed pan if necessary</li> <li>- Removes all the personal clothing and cover the patient with the bath blanket</li> <li>- Keep the patient flat if the condition permits remove extra pillows and back rest</li> <li>- Perform hand hygiene</li> </ul> <p><b><u>Techniques of bed bath and back massage</u></b></p> <ol style="list-style-type: none"> <li>1. Position the client in supine position</li> <li>2. Assist the client to wash the areas in the following sequence face, neck, farthest arm, near arm, chest, abdomen, back, farthest leg, near leg and perineum.</li> <li>3. Rinse the soap from the washed areas and dries the washed areas thoroughly</li> <li>4. Turn the client to side lying position</li> </ol>	<p>Demonstrates the techniques&amp; explains rationale, the group observes</p>	
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<p>Demonstrate the techniques of bed bath and back massage effectively</p>	<p>5. Bath back and buttock</p> <p><b><i>Provide back massage</i></b></p> <ul style="list-style-type: none"> <li>- Warm the hand and apply powder</li> <li>- Distribute the powder across the surface of the back with long strokes from sacrum to the shoulders and back again.</li> <li>- Administer firmer strokes over bony prominences</li> <li>- Knead areas that are especially affected by the pressure of body weight against mattress</li> </ul> <p>6. Reposition the client on his back</p> <p>7. Replaces personal clothing's and changes bed linen</p> <p><b>After care</b></p> <ol style="list-style-type: none"> <li>1. Remove the wash basin &amp;soiled linen</li> <li>2. Make the patient comfortable and proper alignment.</li> <li>3. Straighten the bed linen.</li> </ol>	<p>Q:How will you provide back massage ?</p> <p>Q:what is the importance of back massage ?</p>	
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	<p>4. Comb the hair and arrange the hair.</p> <p>5. Clean all the articles</p> <p>6. Wash hands</p> <p><b>Summary:</b></p> <p>Today in this session we have discussed about the bed bath and back massage, its purposes, preparation of articles and patient techniques of giving the bath and back massage and after care.</p> <p><b>Conclusion:</b></p> <p>We have to provide bath and back massage for the patient daily not only to maintain cleanliness but also to protect the patient from complications.</p>	<p>Teacher summarizes the topic and patient attendant actively listens</p> <p>Questions&amp; Answers</p> <p>Teacher concludes the topic and patient attendant listens</p>	
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### **LESSON PLAN ON TUBE FEEDING**

Topic	:	Tube feeding
Number of samples	:	1 individual at a time
Duration	:	10 to 15 minutes
Place	:	Ward
Method of teaching	:	Discussion cum demonstration

#### **Central Objective:**

On the completion of the demonstration the patient attendants are able to understand about of Nasogastric tube feeding, develop a positive attitude towards tube feeding and develop ability to feed patients through Nasogastric tube with the application of correct knowledge and techniques, in both hospital & home settings.

#### **Specific Objective:**

At the end of the demonstration the care givers are able to

1. Comprehend the facts about nasogastric tube
2. Understand about the type of feed.
3. Identify the articles needed for Ryle's tube feeding
4. Demonstrate the techniques of tube feeding effectively.
5. Identify the complications of the tube feeding.

Specific Objective	Content	Teaching & Learning activity	A V Aids
Introduces the topic	<p><b>INTRODUCTION</b></p> <p>Eating &amp; drinking are one of the basic physiological needs of human. We all are taking food through our mouth because of the illness your patient is not able to take food through mouth. In order to maintain proper nutritional status we have to provide him the food through the nasogastric tube. Some of you may be very confident to give feed through Ryle's tube and some of you may not. In this session we are going to study in detail about nasogastric tube feeding, how to give the feed correctly and what are problems likely to occur.</p>	Introduces the topic & patient attendants listen.	
Comprehend nasogastric tube & tube feeding	<p>Understanding Ryles tube</p> <p><b>About the tube:</b> It is a long, soft, plastic tube</p> <p><b>The length is about :</b> 70cm.</p> <p>Usually 50cm is inside the body.</p> <p>The tube inserted through the nose via throat into the stomach. The tip of the tube is placed in the stomach. The position of the tube can be verified by aspiration method</p>	<p>Explains and the patient attendants listen</p> <p>Q: where do you think the end of the tube is placed?</p>	Showing the Ryle's tube



<p>Demonstrate the techniques of tube feeding effectively</p>	<p>-Clean cloth</p> <p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>- Arrange all articles needed for feeding at beside.</li> <li>- Explain the procedure to the Patient.</li> <li>- Position the patient in semi fowlers position</li> <li>- Cover the patient's chest with a clean cloth</li> <li>- Perform hand hygiene</li> </ul> <p><b><u>Techniques of feeding</u></b></p> <ol style="list-style-type: none"> <li>1.Pinch the tube with one hand remove closure with the other.</li> <li>2. Connect the syringe, place parallel and aspirate gastric juice</li> <li>3.Remove the plunger and pour feed &amp; keep the syringe vertically above the patient's chest level.</li> <li>4.Release pinching &amp;add more feeds</li> <li>5.pour and flush with plain water before syringe empties</li> </ol>	<p>Explain and show preparations for feeding</p> <p>Q:why the patient is maintained in semi fowlers position for feeding?</p> <p>Q:why hand hygiene is important in feeding the patient?</p> <p>Demonstrates the techniques&amp; explains rationale, the group observes</p> <p>Q:How will you check the tube is in stomach?</p> <p>Q: what happens when air enters into the stomach during feeding?</p> <p>Q:what happens when the tube is</p>	
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<p>Identify the complications of N.G.Tube feeding</p>	<p>6.Pinch the tube, remove the syringe and apply closure tightly</p> <p><b><u>After care</u></b></p> <ol style="list-style-type: none"> <li>1.wash the utensils&amp; clean it up</li> <li>2. Wash hands</li> <li>3.Keep note of the time &amp; amount of feed given</li> <li>4. Keep the patient in semi fowlers position for at least 30 minutes. More</li> <li>5.Take care of Patients mouth, lips and nostrils .</li> </ol> <p><b><u>Problems in tube feeding:</u></b></p> <ul style="list-style-type: none"> <li>- Tube migration out of the site.</li> <li>- Erosion &amp; necrosis of oral &amp; nasal mucosa.</li> <li>- Regurgitation &amp; aspiration</li> <li>- Diarrhea &amp; Constipation.</li> <li>- Abdominal distention, cramping &amp; discomfort from too much amount or rapid feeding.</li> <li>- Infection to lungs, throat, sinus.</li> </ul>	<p>placed in too height?</p> <p>Q:why the syringe is flushed with plain water at the end of the feeding?</p> <p>Q: Why the utensils should be washed kept clean.?</p> <p>Q:Why it is important to record the time &amp;amount of feed given?</p>	
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	<p><b><u>REPORTING</u></b></p> <ul style="list-style-type: none"> <li>-Frequent cough</li> <li>-High temperature</li> <li>-Restlessness</li> <li>-Diarrhea</li> <li>-Abdominal pain</li> <li>-Abdominal distention</li> </ul> <p><b>Summary:</b></p> <p>Today in this session we have discussed about the different aspects of nasogastric tube feeding, its purposes, preparation of articles and patient, techniques of giving feeding, after care of patient and articles, problems due to feeding and special precautions to avoid such problems.</p> <p><b>Conclusion:</b></p> <p>We have seen in detail about the all aspects of Nasogastric tube feeding. Each precautions &amp; correct steps you carry, will ensure the safety of the patient.</p>	<p>Q: What are the symptoms in the patient you should inform to the doctor?</p> <p>Summarizes the topic and group actively listens</p> <p>Questions&amp; Answers</p> <p>Concludes the topic and patient attendants listens</p>	
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### **LESSON PLAN ON ASSISTING IN ELIMINATION**

Topic	:	Assisting in elimination
Number of samples	:	1 individual at a time
Duration	:	20 to 30 minutes
Place	:	Ward
Method of teaching	:	Discussion cum demonstration

#### **Central Objective:**

On the completion of the class the participants will get adequate knowledge regarding assisting in elimination develop a positive attitude regarding assisting the patient in elimination and acquire ability to assist in elimination with the application of correct knowledge and techniques, in both hospital & home settings.

#### **Specific Objective:**

At the end of the class the care givers are able to

5. Identify the purposes of assisting in elimination
6. List down the articles needed for assisting in elimination
7. Understand the preparation of patient for elimination.
8. Demonstrate the techniques of assisting in elimination effectively

Specific Objective	Content	Teaching & Learning activity	A V Aids
Introduces the topic	<p><b>INTRODUCTION</b></p> <p>Meeting elimination needs are very important in case of a patient with paralysis . Because of the inability to get out of the bed himself he will be unable to meet his need to eliminate without others help. These urges are very difficult to control. It is the responsibility of the care taker to help him to meet his elimination needs .</p>	Introduces the topic & patient attendant listen.	
Identify the purposes of assisting in elimination	<p><b>Purposes of assisting in elimination</b></p> <p>1. To Relieve discomfort</p>	Explains the purpose & patient attendants listen.	
List down the articles needed for assisting in elimination	<p><b>Preparation of the articles</b></p> <p><u>Articles needed assisting in elimination are the following,</u></p> <ul style="list-style-type: none"> <li>• Bed pan</li> <li>• Draw sheet with makintosh</li> <li>• Water</li> <li>• Tissue paper</li> </ul>	Showing the articles and explains the purposes	Showing the articles needed for assisting in elimination

<p>Understand the preparation of patient for elimination.</p>	<ul style="list-style-type: none"> <li>• Soap towel</li> <li>• Basin</li> </ul> <p><b><u>Preparation</u></b></p> <ul style="list-style-type: none"> <li>- Arrange all articles needed for assisting in elimination at beside.</li> <li>- Explain the procedure to the Patient and explain the patient about the positioning</li> <li>- Provide privacy to the patient by closing the door or by placing the screen</li> <li>- Perform hand hygiene and put on gloves if needed</li> </ul> <p><b><u>Techniques of assisting in elimination</u></b></p>	<p>Explains and show the patient preparation and the patient's attendants listens and participate</p>	
<p>Demonstrate the techniques of assisting in elimination effectively</p>	<p><b><u>Placing bed pan</u></b></p> <ol style="list-style-type: none"> <li>1. Lower the head end of the bed to the lowest position tolerated by the patient</li> <li>2. Roll the draw sheet towards one side of the bed.</li> <li>3. Roll the person on to the side where he is most comfortable</li> <li>4. Place the bedpan against the buttocks</li> </ol>	<p>Demonstrates the techniques&amp; explains rationale, the patient's attendants observes</p>	

	<ol style="list-style-type: none"> <li>5. Ask the patient to roll back, ensuring that the bedpan is under the buttocks</li> <li>6. Elevate the person's head on the bed in to more of a sitting position</li> <li>7. Remove and dispose of gloves.</li> <li>8. Wash your hands and leave the room.</li> <li>9. Return to room promptly when the client calls or check on him after five minutes.</li> </ol> <p><b>Removing the bed pan</b></p> <ol style="list-style-type: none"> <li>10. Wash hands. Put on gloves</li> <li>11. Lower the head end of the bed to a flat position</li> <li>12. Ask the person / roll the person to roll over so that to remove the bed pan</li> <li>13. Grab the pan with one hand and carefully remove it from the person's buttock</li> <li>14. Cover the pan immediately</li> <li>15. Cleanse the person's buttocks or genital area</li> <li>16. Dry the makintosh if wet</li> <li>17. Secure the draw sheet and position the patient</li> </ol>		
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	<p>comfortably.</p> <p><b>After care</b></p> <ul style="list-style-type: none"> <li>• Clean bedpan with disinfectant</li> <li>• Replace the articles in respective areas</li> <li>• Wash hands</li> </ul> <p><b>Summary:</b></p> <p>Today in this session we have discussed about assisting the patient in elimination. its purposes, preparation of patient and articles techniques of assisting in elimination, after care of the patient.</p> <p><b>Conclusion:</b></p> <p>We have seen in detail about the aspects of assisting in elimination. Assisting the patient in elimination helps to improve the comfort and self concept of the patient. I think the knowledge that you gained through this session will improve your practices.</p>	<p>Summarizes the topic and the patient's attendants actively listens</p> <p>Questions&amp; Answers</p> <p>Concludes the topic and the patient's attendants listens</p>	
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**APPENDIX – VII**

**LESSON PLAN ON  
ORAL CARE, BED BATH AND BACK  
MASSAGE, NASOGASTRIC TUBE  
FEEDING AND ASSISTING IN  
ELIMINATION**



Specific Objective	Content	Teaching and learning Activity	AV aids
<p><i>NĀm hñjbw</i> <i>AhXcn, nlp.</i></p> <p><i>hmbhr - nbm/p ĩ Xnsâ</i> <i>eLySĀ jdbp</i></p>	<p><u><i>Dap Ju</i></u></p> <p><i>\1/2sfĀhñcpw Zñhñhpw \1/2ps S jĀpĀĀ hr - nbm/p ĩ Xv Nĉ - K.Ôw</i> <i>Hgnñm/p, ĀWp/sf \c/w s Nlp ĀpXembhñv/mWv. ĀXpt/mse</i> <i>\nSfps S _Ôphñ \v kZ' amññ hmb hr - nbm/p hmb ĩgnbm - Xn \mĀ Āhsc</i> <i>hmb hr - nbm/p hmb kImñm/p ĩ F ĩ Xv \nSfps S ĀpXebmWv.</i></p> <p><u><i>hmbhr - nbm/p ĩ Xnsâ eLySĀ</i></u></p> <ul style="list-style-type: none"> <li><i>jĀpĀĀ hr - nbm/p ĩ Xn \v.</i></li> <li><i>hmbñse CuĀ, w \ne \nĀ - p ĩ Xn \v.</i></li> <li><i>ĀWp_m [ Hgnñm/p ĩ Xn \v.</i></li> <li><i>ĀWp_m [ aqew D - mIp ĩ _pnap p Ā Hgnñm/p ĩ Xn \v.</i></li> </ul> <p><u><i>Bñyamñ km \SĀ</i></u></p> <p><i>-- jĀp hr - nbm/p ĩ \_jv</i></p> <p><i>- t jñ/hñ - nbm/p ĩ \Zmhñw</i></p> <p><i>- t _bvkv</i></p>	<p><i>Āym/n ĩ NĀm hñjbw</i> <i>AhXcn, nlp.</i></p> <p><i>tcmKñbps S _ÔpĀ</i> <i>(iñlp).</i></p> <p><i>hmb hr - nbm/p ĩ Xnsâ eLySĀ</i> <i>hñZñcñm/p.</i></p>	<p><i>Bñyamñ km \SĀ</i> <i>ImWñlp</i></p>

<p> <math>tcm\mathcal{K}_{nsb}\mathcal{H}cp/p\mathcal{I}\text{ h}\mathfrak{n}\mathfrak{l}w</math>  <math>a\backslash\hat{E}nem/p\mathcal{I}</math> </p>	<p> <math>- \mathcal{I}\hat{\mathcal{L}}pd\ (th^{\circ}W^{\circ}sa\mid n\hat{\mathcal{A}})</math>  <math>- \mathcal{I},pw\mathcal{X}W_p^{\circ}-sh\hat{\mathcal{A}}hpw</math>  <math>- \mathcal{S}\hat{\mathcal{A}}\hat{\mathcal{A}}</math>  <math>- t\mathcal{K}_{mkv}\mathcal{J}ckv</math> </p> <p> <math>\underline{hmb\ hr^{-}nbm/p\mathcal{I}\mathcal{X}n\backslash v\ ap\mathfrak{m}bn\ tcm\mathcal{K}_{nsb}\mathcal{H}cp/p\mathcal{I}\text{ h}\mathfrak{n}\mathfrak{l}w}</math> </p> <ul style="list-style-type: none"> <li> <math>hmb\ hr^{-}nbm/p\mathcal{I}\mathcal{X}n\backslash mh\mathfrak{y}amb\ km\mathfrak{l}\backslash\mathcal{S}\hat{\mathcal{A}}\ tcm\mathcal{K}_{nbps}\mathcal{S}</math>  <math>\mathcal{I}cenen\backslash cn\mathcal{I}n\hat{\mathcal{A}}\ (\mathcal{I}ac\mathcal{I}cn^{\circ}phbv/p\mathcal{I}</math> </li> <li> <math>hmb\ hr^{-}nbm/p\mathcal{I}\mathcal{I}ncyw\ tcm\mathcal{K}_{nsb}\ ap\mathcal{I}q\hat{\mathcal{A}}\hat{\mathcal{A}}dnbn/p\mathcal{I}.</math> </li> <li> <math>tcm\mathcal{K}_{nsb}\mathcal{N}mcn\ \mathcal{C}cp^{-}p\mathcal{I}.</math> </li> <li> <math>hr^{-}nbp\hat{\mathcal{A}}\mathcal{X}_pW^{\circ}ns\mathcal{I}m-v\ tcm\mathcal{K}_{nbps}\mathcal{S}\ s\mathfrak{l}^{\circ}v\ adbv/p\mathcal{I}.</math> </li> <li> <math>ss\mathcal{I}\ hr^{-}nbmbn\mathcal{I}yp\mathcal{I}p\mathcal{I}.</math> </li> </ul> <p> <math>\underline{hmb\ hr^{-}nbm/p\mathcal{I}\ co\mathcal{X}n}</math> </p> <p> <math>(1)\ tcm\mathcal{K}_{nsb}\mathcal{N}mcn\ \mathcal{C}cp^{-}p\mathcal{I}.</math>  <math>(2)\ tcm\mathcal{K}_{nbps}\mathcal{S}\ s\mathfrak{l}^{\circ}v\ hr^{-}nbp\hat{\mathcal{A}}\mathcal{X}_pW^{\circ}n\ \mathcal{D}\mathfrak{l}tbn\mathcal{K}_n^{\circ}v\ adbv/p\mathcal{I}.</math>  <math>(\backslash\mathfrak{h}\mathfrak{n}\hat{\mathcal{A}}\backslash n\mathcal{I}pw\ tcm\mathcal{K}_{nsb}</math>  <math>kwc\mathcal{L}n/p\mathcal{I}\mathcal{X}n\backslash p\ th^{-}nbm\ W^{\circ}v).</math> </p>	<p> <math>hmb\ hr^{-}nbm/p\mathcal{I}\mathcal{X}n\backslash v\ \mathcal{B}h\mathfrak{y}amb</math>  <math>km\mathfrak{l}\backslash\mathcal{S}\hat{\mathcal{A}}\mathcal{I}mW^{\circ}n^{\circ}p\ s\mathcal{I}m\mathcal{S}p/p\mathcal{I}hpw</math>  <math>hmi\mathcal{Z}c\mathcal{I}cn/p\mathcal{I}hpw\ s\mathcal{N}\mathfrak{l}p\mathcal{I}.</math> </p> <p> <math>tcm\mathcal{K}_{nsb}\mathcal{H}cp/p\mathcal{I}\text{ h}\mathfrak{n}\mathfrak{l}w\ \mathcal{I}mW^{\circ}n^{\circ}p</math>  <math>s\mathcal{I}m\mathcal{S}p/p\mathcal{I}hpw\ hmi\mathcal{Z}c\mathcal{I}cn/p\mathcal{I}hpw</math>  <math>s\mathcal{N}\mathfrak{l}p\mathcal{I}.</math> </p> <p> <math>Q:\mathcal{F}^{\circ}ps\mathcal{I}m-mW^{\circ}v\ hmb</math>  <math>hr^{-}nbm/p\mathfrak{t}\mathfrak{h}\mathfrak{m}\hat{\mathcal{A}}\ tcm\mathcal{K}_{nsb}\mathcal{N}mcn</math>  <math>\mathcal{C}cp^{-}p\mathcal{I}\mathcal{X}v?</math> </p>	
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<p> <i>hmb hr-nbmlp l coXn</i>  <i>JmW<sup>o</sup>n p sJm SpjpJ</i> </p>	<p> <i>(3) hmb JgpJn Xp p lXn \p th-n t_kv tcmK<sub>n</sub>bps S</i>  <i>hmb/cnJnembn shbvjpJ.</i> </p> <p> <i>(4) hmb hr-nbmlp lXn \p th-n tcmK<sub>n</sub>tbm Sv hmb Xpdlm<sup>a</sup></i>  <i>Bhiys, SpJ.</i> </p> <p> <i>(5) Sq<sup>-</sup>v t/tJm hr-nbmlpkm \pA<sup>o</sup> (ZmhStam D/tbmK<sub>n</sub><sup>-</sup>v</i>  <i>JApJ<sup>o</sup>A<sup>o</sup> hr-nbmlpJ</i>  <i>(Jpdw<sup>-</sup> mK<sub>w</sub>, heXp<sup>-</sup> mK<sub>hpw</sub>, TSXp<sup>-</sup> mK<sub>hpw</sub></i>  <i>D<sup>o</sup>A<sup>o</sup> mK<sub>w</sub>, Nhbvjp l<sup>-</sup> mK<sub>w</sub>, apXembh tamWbn<sup>o</sup>A<sup>o</sup> \n l<sub>pw</sub></i>  <i>Xmtgm<sup>a</sup>v hr-nbml/W<sup>o</sup>w)</i> </p> <p> <i>(6) \m/v hr-nbmlpJ.</i> </p> <p> <i>(7) shA<sup>o</sup>w D/tbmK<sub>n</sub><sup>-</sup>v hmb JgpJpJ.</i> </p> <p> <i>(8) XpW<sup>o</sup>n D/tbmK<sub>n</sub><sup>-</sup>v apJw XpSbvjpJ.</i> </p> <p> <u><i>hmb hr-nbml/nbXn \p tijw sA<sup>o</sup>l- Jmcy, S<sup>o</sup>A<sup>o</sup></i></u> </p> <ul style="list-style-type: none"> <li>- <i>Xp-nA<sup>o</sup>K<sub>v</sub>fukdn<sup>a</sup> tXbvjpJ.</i></li> <li>- <i>hmb hr-nbml/nbmlpkm<sup>a</sup> D/tbmK<sub>n</sub><sup>-</sup> FA<sup>o</sup>m km/\S<sub>fpw</sub></i>  <i>hr-nbmbn JgpJn shbvjpJ.</i></li> </ul>	<p> <i>Q :ssJ hr-nbmbn JgptJ- Xnsâ</i>  <i>BhiyJX F<sup>-</sup>v?</i> </p>	
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<p>hmb hr- nbn/nbXn\p tijw sNtì- ImcySÄ a\Ênem/pJ</p>	<ul style="list-style-type: none"> <li>- -----tcmKnsb icnmbn InS-pJ</li> <li>- ssJJÄ hr- nbn InpJpJ</li> </ul> <p><u>Kw(KSw</u></p> <p>U's- \pS S Gu emÊnÄ \pÄ hmb hr- nbn/pJ Xnsâ hniZ hnhcSsf, ün, ÄXmbXv hmb hr- nbn kqIn/pJ Xnsâ eErSÄ Bhüyamb coXn, Bhüramb km/\SÄ Fs' ms/bmWv, Fss\bmWv hr- nbn/pJ coXn, hr- nbn/n Ign Xn\p tijw F'p sNüWw Fs/ms/bmWv/dXv.</p> <p><u>D/kw/cn/pJ</u></p> <p>\pÄ Ut, mÄ hr- nbn/pJ Xnsâ hniZ hnhcSsf, ünbmWv kwkncn"Xv. hmb hr- nbn/pJXv hfsc [l/m\s, « ImcyamWv, [tXyIn"pw Syq_neqs S Bmcw InpJhÄ/v. aqinÄ Syq_pffXp ImcWw ÄSs\hpÄ tcmKnsÄ hmbneqs DbmWv [l/m\ambpw izkn/pJ. ÄXp ImcWw hmbnse Dan\ocp häpw ÄWp_m[ D-mJphm\pw DÄ knyX hfscb/nJamWv.</p>	<p>hmb hr- nbn/nbXn\p tijw sNtì- ImcySÄ ImWn"p sImSp/pJ</p> <p>Q: F'p sIm-mWv \pÄ Kxfnkdn Np-nÄ tX/pJXv.</p> <p>Q: hmb hr- nbn/pJhmb D/tbmKn" km/\SÄ</p> <p>Q: hr- nbnbnshbv/pJ sX'n\v?</p> <p>Äym/nJ kw(KIn/pJ.</p> <p>tcmKnbps S ÖpiÄ (v'n"ncn/pJ.</p> <p>tNmZySfpw, D-cSfpw</p> <p>Äym/nJ D/kw/cn/pJ.</p>	
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Specific Objective	Content	Teaching and learning Activity	AVAids
<p><i>N̄t̄m h̄njbw</i></p> <p><i>Th̄Xcn, n̄ip̄J</i></p>	<p><u><i>J̄nen̄t̄ J̄n̄S̄-n̄ J̄pf̄n, n̄ip̄J̄ cōd̄X̄n</i></u></p> <p><u><i>B̄ap̄ J̄w</i></u></p> <p><i>1/2sf̄t̄m̄h̄cp̄w Z̄nh̄k̄hp̄w 1/2ps̄S̄t̄Z̄lw̄ip̄N̄nb̄mb̄n̄ \nē\nēt̄-p̄J̄p. tcm̄K̄w</i></p> <p><i>J̄mc̄W̄w̄ \n̄J̄f̄ps̄S̄_Ĉ̄p̄h̄n̄\ v̄ Āh̄cps̄S̄t̄Z̄l̄ip̄N̄n̄X̄zw̄ k̄zb̄w̄ \nē\nēt̄-m̄</i></p> <p><i>J̄gn̄bp̄J̄n̄t̄. Āt̄X̄pt̄/m̄sē-s̄J̄ J̄n̄S̄, n̄emb̄X̄n̄\m̄t̄ Āh̄t̄iv̄ th̄sd̄</i></p> <p><i>J̄ē_p̄nap̄p̄J̄f̄pw̄ h̄cm̄ k̄n̄ȳX̄bp̄-v, D̄Z̄m̄lc̄W̄amb̄n̄ s̄X̄men̄ s̄/m̄p̄J̄.</i></p> <p><i>Āt̄X̄n̄\m̄t̄ Āh̄sc̄ Ḡ-cw̄_p̄nap̄p̄J̄f̄n̄t̄ \n̄J̄v̄ c̄L̄n̄ip̄J̄bp̄w̄ Āh̄cps̄S̄t̄Z̄lw̄</i></p> <p><i>h̄r̄-n̄b̄mb̄n̄ \nē\nēt̄-p̄J̄bp̄w̄ s̄N̄l̄p̄J̄F̄J̄X̄v̄ \n̄J̄f̄ps̄S̄J̄S̄ab̄m̄W̄v̄</i></p> <p><u><i>ēL̄ȳJ̄t̄</i></u></p> <ul style="list-style-type: none"> <li><i>iccc̄w̄ h̄r̄-n̄b̄m̄ip̄J̄X̄n̄\p̄th̄-n̄</i></li> <li><i>tcm̄K̄ns̄b̄ D̄t̄j̄h̄m̄\m̄ip̄J̄X̄n̄\p̄th̄-n̄</i></li> <li><i>c̄āN̄w̄l̄J̄āW̄w̄ J̄q̄p̄h̄m̄ th̄-n̄</i></li> <li><i>ak̄nep̄J̄t̄ip̄w̄ k̄Ō̄n̄J̄t̄ip̄w̄ h̄ymb̄m̄aw̄ s̄J̄m̄ S̄p̄ip̄J̄X̄n̄\p̄th̄-n̄</i></li> </ul>	<p><i>Āym̄J̄n̄J̄ B̄ap̄ J̄w̄ \ĀJ̄p̄J̄p.</i></p> <p><i>tcm̄K̄ns̄b̄ J̄pf̄n, n̄ip̄J̄X̄ns̄ā</i></p> <p><i>ēL̄ȳJ̄t̄/d̄ps̄J̄m̄ S̄p̄ip̄J̄p</i></p> <p><i>Q :tcm̄K̄ns̄b̄</i></p>	

<p> <i>cmK<sub>nsb</sub></i>  <i>Ipf<sub>n</sub>, n<sub>i</sub>p<sub>l</sub>X<sub>n</sub> \v</i>  <i>Bhüyamb km/\SÄ</i>  <i>Idtp<sub>I</sub></i> </p> <p> <i>tcmK<sub>nsb</sub> Hcp<sub>i</sub>p<sub>l</sub></i>  <i>hn/w a \Ênem<sub>i</sub>p<sub>I</sub></i> </p>	<ul style="list-style-type: none"> <li>• <i>tcmK<sub>nsb</sub> Dt<sup>-</sup> P<sub>n</sub>, n<sub>i</sub>p<sub>l</sub>X<sub>n</sub> \p th<sup>-</sup>n</i></li> <li>• <i>tcmK<sub>n</sub>i<sub>p</sub> kp Ihpw hn(iahpw \ÄSp<sub>I</sub></i></li> </ul> <p><u><i>Bhüyamb km/\SÄ</i></u></p> <ul style="list-style-type: none"> <li>• <i>hmjvt<sub>kn</sub></i></li> <li>• <i>tk<sub>m</sub>, v</i></li> <li>• <i>X<sub>p</sub>W<sub>n</sub></i></li> <li>• <i>_m<sup>-</sup> v _vfm \ä<sub>v</sub></i></li> <li>• <i>[cn<sub>i</sub>p<sub>h</sub>m \pÄ (\UÊ<sub>v</sub></i></li> <li>• <i>s_Î<sub>v</sub>jeäv</i></li> <li>• <i>SÄÄ</i></li> <li>• <i>_jä<sub>v</sub></i></li> <li>• <i>Iu UÄ, temp<sub>I</sub> F<sub>l</sub>nh</i></li> </ul> <p><u><i>tcmK<sub>nsb</sub> Hcp<sub>i</sub>p<sub>l</sub> hn/w</i></u></p> <ul style="list-style-type: none"> <li>• <i>Bhüyamb FÄ<sub>m</sub> km/\Sfpw I<sub>nen</sub> \cnInÄ \nc<sup>-</sup> nsh<sub>i</sub>p<sub>I</sub></i></li> <li>• <i>tcmK<sub>ntbm</sub> Sv Ipf<sub>n</sub>, n<sup>-</sup> p sIm Sp<sub>i</sub>p<sub>l</sub>X<sub>ns</sub> \, ä<sub>n</sub> /d<sup>-</sup> p sIm Sp<sub>i</sub>p<sub>I</sub></i></li> <li>• <i>tcmK<sub>nsb</sub> I<sub>nsensâ</sub> Hcp hit<sup>-</sup> imbn In<sub>S</sub><sup>-</sup> p<sub>I</sub></i></li> <li>• <i>dqansâ hmXnÄ, IÄ<sub>∞</sub> F<sub>l</sub>nh Ä<sub>S</sub><sup>-</sup> v tcmK<sub>n</sub>i<sub>v</sub> kzImcyX \ÄSp<sub>I</sub></i></li> </ul>	<p><i>Ipf<sub>n</sub>, n<sub>i</sub>p<sub>l</sub>X<sub>n</sub> \mW<sub>v</sub> ?</i></p> <p> <i>tcmK<sub>nsb</sub> Hcp<sub>i</sub>p<sub>l</sub> v hn/w</i>  <i>ImW<sub>n</sub><sup>-</sup> psIm Sp<sub>i</sub>p<sub>l</sub>hpw</i>  <i>/d<sup>-</sup> psIm Sp<sub>i</sub>p<sub>l</sub>hpw sN<sub>i</sub>p<sub>I</sub></i> </p> <p> <i>Q: Ipf<sub>n</sub>, n<sub>i</sub>p<sub>l</sub> hn/w tcmK<sub>n</sub>i<sub>v</sub></i>  <i>/d<sup>-</sup> psIm Spt<sub>i</sub> - Xnsâ BhüyIX</i> </p>	<p> <i>tcmK<sub>nsb</sub></i>  <i>Ipf<sub>n</sub>, n<sub>i</sub>p<sub>l</sub>X<sub>n</sub> \v</i>  <i>Bhüyamb km/\SÄ</i>  <i>ImW<sub>n</sub><sup>-</sup> p sIm Sp<sub>i</sub>p<sub>I</sub></i> </p>
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	<p> <math>tX^{\sim} p s f m \mathcal{S} p i p f, a \hat{E} m P v s \hat{N} l p f, D u c h n \hat{A} \setminus n \mathcal{I} p w t X m \hat{A}</math>  <math>h s c h p w X n c n^{\sim} p w</math> </p> <ul style="list-style-type: none"> <li> <math>F \hat{A} p f f p s \mathcal{S} \setminus m \hat{K} s f n \hat{A} \setminus \mathcal{I} m b n a \hat{E} m P v s \hat{N} l p f</math> </li> <li> <math>f v \setminus e U v s \hat{N} l p f \setminus t X y f n^{\sim} p w i c c^{\sim} m c w f m c W^o w f q \mathcal{S} p X \hat{A}</math>  <math>k_{1/2} \hat{A}^{\pm} w</math> </li> </ul> <p> <math>D - m f m^o k m^o y c X b p \hat{A} n \mathcal{S} s f n \hat{A}</math> </p> <p> <math>\delta \quad t c m \hat{K} n s b h c - p w X n c n s f a e \hat{A}^{\sim} n f n \mathcal{S}^{\sim} p f</math> </p> <p> <math>\gamma \quad t c m \hat{K} n b p s \mathcal{S} h k v \setminus X \mathcal{S} \hat{A} a m \ddot{a} n s f m \mathcal{S} p i p f</math> </p> <p> <u>tijw s N i l - f m c y, \mathcal{S} \hat{A}</u> </p> <p> <math>(1) \quad s \_ b v k n \setminus p w a \ddot{a} p \hat{N}^{\sim} b m b s \_ f v j e \ddot{a} p f f p w a m \ddot{a} p f</math> </p> <p> <math>(2) \quad t c m \hat{K} n s b i c n b m b c c X n b n \hat{A} f n \mathcal{S}^{\sim} p f</math> </p> <p> <math>(3) \quad f n \mathcal{S} i h n c n s b \hat{A} m w t \setminus s c h m i p f</math> </p> <p> <math>(4) \quad X e a p \mathcal{S} n s b \hat{A} m w \hat{N}^{\sim} f n s f c n s h i p f</math> </p> <p> <math>F \hat{A} m k m \setminus \setminus f p w h r^{\sim} n b m i n s h i p f s s f f \hat{A} \quad \setminus \mathcal{I} m b n f g p f p f</math> </p> <p> <u>k w \setminus \hat{K} f w</u> </p> <p> <math>\mathcal{U} t, m \hat{A} \setminus \setminus \hat{A} f c n e n \hat{A} f n \mathcal{S}^{\sim} n f p f n, n i p \mathcal{I} X n s \setminus f p d n^{\sim} p w \_ m i v a k m P n s \setminus</math> </p>	<p> <math>Q : \setminus n \mathcal{S} \hat{A} \setminus p d w f \mathcal{S} s \setminus a \hat{E} m P v</math>  <math>s \hat{N} l p w ?</math> </p> <p> <math>Q : \setminus p d w f^{\sim} n \setminus m W v a \hat{E} m P v</math>  <math>s \hat{N} l p \mathcal{I} X v ?</math> </p>	
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	<p><math>Ipdn''pw \mathcal{A}Xnsâ \mathcal{D}t^{\pm i}Ssf Ipdn''pw \mathcal{A}Xn \setminus v \mathcal{B}hiyamb \mathcal{K}m[\setminus Ssf</math></p> <p><math>Ipdn''pw F\mathcal{Y}s \setminus bm W^{\circ} \mathcal{A}Xv s \mathcal{N}lp \mathcal{I}Xv F \mathcal{I}nhsb \mathcal{A}mam W^{\circ} \mathcal{G}hns \mathcal{D}</math></p> <p><math>]d''Xv.</math></p> <p><u><math>\mathcal{D}/kwsmcw</math></u></p> <p><math>Znhkhpw tcm \mathcal{K}nsb \mathcal{I}pfn, nlp \mathcal{I}hpw\_m \setminus v a \mathcal{E}m Pvs \mathcal{I}m \mathcal{D}p \setminus p \mathcal{I}hpw s \mathcal{N}lp \mathcal{I}</math></p> <p><math>F \mathcal{I}Xv hfsc \mathcal{A}Xymhiyam W^{\circ}. \mathcal{G}Xv \mathcal{A}hept \mathcal{D} t.Zhip \mathcal{N}nXzw</math></p> <p><math>\setminus ne \setminus n \mathcal{A}^{-p} \mathcal{I}Xn \setminus p am \{Xa \mathcal{A} \mathcal{A}hsc thsdhpw \} e\_p^2 nap \mathcal{S}p \mathcal{I} \mathcal{A}</math></p> <p><math>\mathcal{D}-m \mathcal{I}p \mathcal{I}Xns \setminus X \mathcal{S}bm \setminus pw \mathcal{K}mbn \setminus p \mathcal{I}p.</math></p>	<p><math>\mathcal{A}ym \setminus n \mathcal{I}kw \{ \mathcal{K} \setminus n \setminus p \mathcal{I}p.</math></p> <p><math>tcm \mathcal{K}nhs \mathcal{D} \_ \hat{\mathcal{O}}p \setminus \mathcal{A} \{ i^{\pm n} \_ ncn \setminus p \mathcal{I}p.</math></p> <p><math>t \mathcal{N}m Z.y \mathcal{I}fpw, \mathcal{D}^{-c} \mathcal{I}fpw</math></p> <p><math>\mathcal{A}ym \setminus n \mathcal{I} \mathcal{D} \setminus kw \setminus cn \setminus p \mathcal{I}p.</math></p>	
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Specific Objective	Content	Teaching and learning Activity	AV aids
<p><i>N̄t̄m h̄njbw</i> <i>ĀhXcn, n̄ip̄.</i></p>	<p><u><i>Bap̄Iw</i></u></p> <p><i>B̄hm-chpw P̄ehpw ā p-jysâ  ue- n̄t̄, n̄ v̄ ĀoXy- 'm-t̄ /L̄n-X-amb c-v̄L̄S-</i> <i>f-S-fm-W̄v.  n̄S-sf-Ām-h̄cpw Xs̄   n̄S-fps̄S_Ôp-h̄n v̄ Syq_v̄hgn</i> <i>B̄hmcw s̄Im̄Sp-̄p-s̄Im--n-cn- p- f-h̄cm-W̄v. Tū emk̄n̄t̄ ap̄iv̄ Syq_p̄hgn</i> <i>B̄hmcw s̄Im̄Sp- p- f-X̄nsâ h̄nh̄n[ h̄i-S-sf-, ǟn h̄ni-L-amb̄n ā /L̄n-em- mw.</i></p> <p><u><i>ĪW̄ws̄Im̄Sp- p-h̄m- p- /t̄bm-K̄n- p̄  Syq n-s̄ -, ǟn ā /L̄n-em-t̄ /</i></u></p> <p><u><i>Imcy-S̄t̄</i></u></p> <p><i>Tū Syq_v̄'m̄J̄n̄ v̄ s̄Im-p--m- n-b̄X̄pw arZ̄p-h̄p-am-W̄v. T̄X̄n v̄ ɣoc̄m  of-ap-</i> <i>-v. T̄X̄n̄t̄ Ḡf-t̄L̄iw̄ 5oc̄m H̄m̄fw `m̄K̄w ice-c-̄n- p-Ān-em-b̄n-cn- pw. Tū</i> <i>Syq_v̄ aq- n-eqs̄S̄ f̄S̄-̄n-s̄X̄m--b̄n-eqs̄S̄ h̄b-ǟn-te- m̄W̄v T̄cn-cn- p- f-X̄v.</i></p>	<p><i>Āȳm̄ n̄f̄N̄t̄m̄ h̄njbw</i> <i>ĀhXcn, n̄ip̄ p.</i> <i>tcm̄K̄nh̄ps̄S_Ôp Ā</i> <i>(i:n̄ip̄ p.</i></p> <p><i>Ḡ: Syq_nsâ Ā K̄-`m̄K̄w ice-c-̄nsâ</i> <i>ḠX̄p-`m̄K̄-̄m̄W̄v Q̄n̄X̄n-s̄N̄- p-</i> <i> X̄v?</i></p>	



<p><math>sIm\mathcal{D}p-ip-\mathbb{I}</math></p> <p><math>X_n \backslash mh-iy-amb\ km[-</math></p> <p><math>\backslash-\mathcal{S}\tilde{\mathcal{A}}a \backslash \hat{E}nem/ p\mathcal{I}</math></p> <p><math>\mathcal{B}Imcw\ sIm\mathcal{D}p-ip-\mathbb{I}-</math></p> <p><math>X_n \backslash p\ ap^{1/4}mbn</math></p> <p><math>tcn\mathcal{K}_{nsb}\ \mathcal{H}cp/ p\ \mathbb{I}</math></p> <p><math>hn[w\ a \backslash \hat{E}nem/ p\mathcal{I}</math></p> <p><math>\mathcal{B}Imcw\ \ sIm\mathcal{D}p-ip-\mathbb{I}</math></p> <p><math>coX_n\ \ \ sImW^n \ddot{ } p</math></p> <p><math>sIm\mathcal{D}p/ p\mathcal{I}</math></p>	<p><u><math>\mathcal{B}h-iy-amb\ km[- \backslash-\mathcal{S}\tilde{\mathcal{A}}</math></u></p> <p><math>kn\dot{d}n^{\circ}\ v\ (20 - 50ml)</math></p> <p><math>p\ Ymkno\hat{\mathcal{A}}\cdot\mathcal{B}Imcw</math></p> <p><math>p\ Ymkno\hat{\mathcal{A}}\ sh\hat{\mathcal{A}}w</math></p> <p><math>p\ hr^-n-bp\hat{\mathcal{A}}\ X_pW^n</math></p> <p><u><math>\mathcal{B}Imcw\ sIm\mathcal{D}p-ip-\mathbb{I}-X_n \backslash p\ ap^{1/4}mbn\ ....</math></u></p> <p><math>\mathcal{B}Imcw\ sIm\mathcal{D}p-ip-hm-\backslash m-h-iy-amb\ km[- \backslash-\mathcal{S}\tilde{\mathcal{A}}\ tcn\mathcal{K}_{n-hps}\mathcal{S}</math></p> <p><math>\mathcal{I}_{\ll n-en}-\backslash-cn-\mathcal{I}n\hat{\mathcal{A}}\ (\mathcal{I}ac-\mathcal{I}-cn-\ddot{ }p-sh-bv/ p-\mathcal{I}.</math></p> <p><math>p\ \mathcal{B}Imcw\ X_{cp}\ \mathbb{I}\ \mathcal{I}mcyw\ tcn\mathcal{K}_{nsb}\ ap\ \mathcal{I}q\hat{\mathcal{A}}\ \mathcal{A}dn-bn-ip\mathcal{I}</math></p> <p><math>p\ tcn\mathcal{K}_{nsb}\ \mathcal{N}mcn-bn-cp-\ddot{ }p\mathcal{I}</math></p> <p><math>p\ tcn\mathcal{K}_{n-hps}\mathcal{S}\ s\backslash^{\circ}\ v\ hr^-n-bp\hat{\mathcal{A}}\ X_pW^n\ D/-tbm-\mathcal{K}_n\ddot{ }v\ ad-bv/ p\mathcal{I}</math></p> <p><math>p\ ss\mathcal{I}\mathcal{I}\hat{\mathcal{A}}\ hr^-n-bmbn\ \mathcal{I}yp\mathcal{I}p\mathcal{I}</math></p> <p><u><math>\mathcal{B}Imcw\ sIm\mathcal{D}p-ip-\mathbb{I}\ coX_n</math></u></p>	<p><math>s\mathcal{N}lp\mathcal{I}</math></p> <p><math>tcn\mathcal{K}_{nsb}\ \mathcal{H}cp/ p\ \mathbb{I}\ hn[w\ \mathcal{I}mW^n \ddot{ } p</math></p> <p><math>sIm\mathcal{D}p/ p\mathcal{I}bpw\ hniZ\circ\mathcal{I}cn/ p\mathcal{I}bpw</math></p> <p><math>s\mathcal{N}lp\mathcal{I}</math></p> <p><math>Q: \mathcal{F}^{\cdot}p-s\mathcal{I}m--mW^{\circ}v\ \mathcal{B}Imcw</math></p> <p><math>sIm\mathcal{D}p-ip-t^{1/4}m\hat{\mathcal{A}}\ tcn\mathcal{K}_{nsb}</math></p> <p><math>\mathcal{N}mcn-bn-cp-\ddot{ }W^{\circ}w\ \mathcal{F}\mathbb{I}v\ ]d-bp-</math></p> <p><math>\mathbb{I}X_v?</math></p> <p><math>\mathcal{B}Imcw\ sIm\mathcal{D}p-ip-\mathbb{I}\ coX_n\ \ \mathcal{I}mW^n \ddot{ } p</math></p> <p><math>sIm\mathcal{D}p/ p\mathcal{I}</math></p>	
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<p> <math>\mathfrak{S}yq\_vkw\_ - \hat{\mathcal{O}}\text{-}ambn</math>  <math>\mathcal{D}\text{-}m\text{-}Im\text{-}hp\mathbb{I}\_p\text{-}n\text{-}ap\text{-}</math>  <math>\llbracket p\text{-}\mathcal{I}\tilde{\mathcal{A}}a\backslash\hat{\mathcal{E}}nem\rrbracket p\mathcal{I}.</math> </p>	<p> <math>hr^-n\text{-}bmbn\mathcal{I}gp\mathcal{I}n\text{ }hbv\text{ }ip\mathcal{I}</math>  <math>p\text{ }ss\mathcal{I}\mathcal{I}\tilde{\mathcal{A}}\text{ }hr^-n\text{-}bmbn\mathcal{I}gp\text{-}\mathcal{I}p\mathcal{I}</math>  <math>p\text{-}\mathcal{B}Imcw\text{ }s\mathcal{I}m\mathcal{I}p^-ka\text{-}bhpw\mathcal{A}fhpw\mathcal{I}gp\mathcal{X}n\text{ }hbv\text{ }ip\mathcal{I}</math>  <math>p\text{ }tcm\mathcal{K}_{nsb}\text{ }_{30}\text{ }an\backslash n\ddot{u}v\text{ }t\backslash cw\text{-}\mathcal{I}q\mathcal{I}\mathcal{S}n\mathcal{X}mcn\text{-}in\text{-}\mathcal{S}\text{-}^p\mathcal{I}</math>  <math>p\text{ }tcm\mathcal{K}_{n\text{-}bps}\mathcal{S}\text{ }hmbv, aq\text{ }iv, \mathcal{N}p\text{-}v\mathcal{U}h\text{ }hr^-n\text{-}bmbn\text{ }kq\mathcal{L}n\text{-}ip\mathcal{I}</math>  <u><math>\mathfrak{S}yq\_vkw\_ - \hat{\mathcal{O}}\text{-}ambn\mathcal{D}\text{-}m\text{-}Im\text{-}hp\mathbb{I}\_p\text{-}n\text{-}ap\text{-}\llbracket p\text{-}\mathcal{I}\tilde{\mathcal{A}}</math></u>  <math>\mathfrak{S}yq\_ns\hat{a}\mathcal{Q}m\backslash w\text{ }s\mathcal{X}\ddot{a}p\mathcal{I}</math>  <math>p\text{ }hmbn\text{-}epw, aq\text{ }in\text{-}epw, hb\text{-}\ddot{a}nepw\text{ }hr\mathcal{W}^{\circ}\mathcal{I}\tilde{\mathcal{A}}</math>  <math>p\text{-}\mathcal{B}Imcw\mathcal{X}n\mathcal{I}\text{-}\llbracket \tilde{\mathcal{A}}</math>  <math>p\text{ }hb\text{-}dn\text{-}fiw, ae\text{-}\_ \hat{\mathcal{O}}w</math>  <math>p\text{ }hbdp\text{ }hc\mathcal{A}i\mathcal{A}, hbdp\text{ }th\mathcal{L}\text{-}\backslash, hbdp\text{ }s\text{ }cp\text{-}i\mathcal{A}</math>  <math>p\text{ }izm\mathcal{k}\text{-}t\mathcal{I}m\text{-}iw, s\mathcal{X}m\text{-}\mathcal{F}\mathbb{I}n\text{-}hn\text{-}\mathcal{S}\text{-}\mathcal{I}fn\mathcal{A}\mathcal{A}\mathcal{W}p\text{-}_m\text{ }[</math>  <math>p\text{-}\mathcal{B}Imcw\text{ }izm\mathcal{k}\text{-}t\mathcal{I}m\text{-}i\text{-}^n\mathcal{A}\mathcal{I}\mathcal{S}\text{-}i\mathcal{A}</math>  <u><math>t\mathcal{U}m\mathcal{I}v\mathcal{S}sd\mathcal{A}dn\text{-}bn\text{-}ti\text{-}\mathcal{I}mcy\text{-}\mathcal{I}\tilde{\mathcal{A}}</math></u> </p>	<p> <math>\mathcal{I}gp\mathcal{X}n\text{ }hbv\text{ }ip\text{-}\mathbb{I}\text{-}s\mathcal{X}\text{-}^n\backslash v?</math> </p> <p> <math>tcm\mathcal{K}_{n\text{-}bn}\mathcal{A}\mathcal{I}m\mathcal{W}^{\circ}m\text{-}hp\mathbb{I}\mathcal{F}s\text{ }^{\mathcal{A}nw}\text{ }e\mathcal{L}\text{-}</math>  <math>\mathcal{W}^{\circ}\mathcal{I}\text{-}fm\mathcal{W}^{\circ}t\mathcal{U}m\mathcal{I}v\mathcal{S}sd\mathcal{A}dn\text{-}bn\text{-}ti\text{-}</math> </p>	
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Specific Objective	Content	Teaching and learning Activity	AVAids
<p><i>N̄Ām h̄njbw</i> <i>ĀhXcn, n̄ip̄Īp</i></p>	<p><u><i>h̄nkĀȪ\ -n̄\ v̄ k̄mbn̄ip̄Ī</i></u></p> <p><u><i>B̄ap̄Īw</i></u></p> <p><i>V̄zps̄S̄ [̄m̄Yan̄ĪImcȳS̄f̄n̄sem̄Īm̄W̄v̄ h̄nkĀȪ\w. h̄nkĀȪ\w̄s̄N̄l̄phm̄</i> <i>k̄mbn̄ip̄ĪF̄Īp̄ĀXv̄X̄f̄ĀĪv̄Īn̄S̄Īp̄ĪH̄cp̄tcm̄K̄nsb̄k̄w̄_Ô̄n̄v̄h̄f̄sc̄</i> <i>[̄]l̄m̄\s̄, «̄H̄cp̄B̄h̄iyam̄W̄v̄. Īn̄S̄Ībn̄Ā\̄n̄Īpw̄F̄ḡpt̄ĪĀim̄\̄p̄Ā_̄p̄nap̄«̄v̄</i> <i>Īmc̄W̄w̄Āh̄Āiv̄ĀXn̄\̄v̄āäp̄Āh̄cps̄S̄k̄mban̄Āms̄X̄k̄zbw̄Īgn̄bp̄Ībn̄Ā.</i> <i>h̄nkĀȪn̄ip̄hm̄\̄p̄ĀB̄h̄iyw̄\̄ap̄iv̄X̄S̄p̄\̄n̄Ā_̄phm̄Īgn̄bp̄ĪH̄cp̄Īm̄cȳāĀ.</i> <i>tcm̄K̄nsb̄ip̄(̄iq̄jn̄ip̄Īh̄cps̄S̄N̄pāX̄ebm̄W̄v̄tcm̄K̄nsb̄Ābm̄f̄ps̄S̄</i> <i>[̄]m̄Yan̄ĪImcȳamb̄h̄nkĀȪ\ -n̄\ v̄ k̄mbn̄ip̄ĪF̄Īp̄ĀXv̄.</i></p> <p><u><i>ēĪȳS̄Ā</i></u></p> <ul style="list-style-type: none"> <li><i>_̄p̄nap̄«̄v̄Īpd̄ip̄hm̄</i></li> <li><i>ā\̄kw̄X̄r̄\̄v̄X̄n̄ip̄th̄-n̄</i></li> </ul> <p><u><i>B̄h̄iyamb̄kn̄\̄S̄Ā</i></u></p> <ul style="list-style-type: none"> <li><i>s̄_̄Ūv̄]̄m̄</i></li> </ul>	<p><i>N̄Ām h̄njbw ĀhXcn, n̄ip̄Īp</i></p>	
<p><i>h̄nkĀȪ\ -n̄\ v̄</i> <i>k̄mbn̄ip̄ĪX̄ns̄â</i></p>			



<p>eŁyŠŒ/dhpf</p> <p>hñkŒÖ\ -n\ v</p> <p>hmbn/p hñw Bhiyamb</p> <p>km[\ŠŒ/dhpf</p> <p>tcnKntbm</p> <p>Xlmdm/p hñ[w</p> <p>a\Ênem/pf</p> <p>hñkŒÖ\ -n\ v</p> <p>hmbn/p hñ[w</p>	<ul style="list-style-type: none"> <li>• dŒjäv</li> <li>• shŒw</li> <li>• Šnjyq t/, Œ</li> <li>• tkñ, v</li> <li>• s_hvkv</li> </ul> <p><u>tcnKntbm Xlmdm/p hñ[w</u></p> <ul style="list-style-type: none"> <li>• hñkŒÖ\ -n\ v Bhiyamb km[\ŠŒ tcnKntbm Š Šnen\cnŠnŒ</li> <li>• {ŠacŠcn~p sh/pf</li> <li>• hñkŒÖ\ -n\ v hmbn/p hñw Šmcyw</li> <li>• tcnKntbm Šd~p a\Ênem/p Šm Šp/pf,</li> <li>• tcnKntbm Šv kz Šmcyw\Œ Šp/pf</li> <li>• ssŠŠŒ hr~nmbn Šp/pf</li> </ul> <p><u>hñkŒÖ\ -n\ v hmbn/p hñ[w</u></p> <p><u>s Œv/ñ hñv/p hñ[w</u></p> <p>(1) Šnensâ Xehñv/p hñw~mKw Xngv~n hñv/pf.</p> <p>(2) thWsa\ñŒ Yukv\cn/pf.</p>	<p>Bhiyamb km[\ŠŒ ŠmWñ~p</p> <p>šm Šp~v ŒXnsâ D/tbmKŠŒ</p> <p>Šd~ps Šm Šp/pf</p> <p>tcnKntbm Xlmdm/p hñ[w</p> <p>ŠmWñ~p šm Šp/p Šhpw</p> <p>hñiŁcŠcn/p Šhpw šŒ/pf</p> <p>hñkŒÖ\ -n\ v hmbn/p hñ[w</p> <p>ŠmWñ~ps Šm Šp/pf</p>	<p>Bhiyamb km[\ŠŒ</p> <p>ŠmWñ~ps Šm Šp/pf</p>
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<p><math>JmW^{\circ}n^{\circ}p</math></p>	<p>(3) <math>s\_Jn\tilde{A}^{\circ}mJnJvjeäv\ hñcn/pJ.</math></p>		
<p><math>sJm\ \mathfrak{D}p/pJ</math></p>	<p>(4) <math>tcn\mathcal{K}_{nsb}\ J_{\mathfrak{C}nensâ}\ \mathfrak{G}sX\  \ nepw\ Hcp\ hüt^{\circ}\ iv\ \mathcal{N}cn^{\circ}p\ Jn\mathfrak{D}^{\circ}pJ.</math></p>		
	<p>(5) <math>s\_Uv/m^{\circ}\ h^{\circ}psJm\ \mathfrak{D}p/pJ.</math></p>		
	<p>(6) <math>tcn\mathcal{K}_{nsb}\ Xncn^{\circ}p\ t\backslash sc\ Jn\mathfrak{D}/m^{\circ}\ kImbn/pJ, s\_Uv/m^{\circ}\ icubmbn</math>  <math>\quad -s\mathbb{I}bmt\ W^{\circ}m\ \mathfrak{C}cn/p\ \mathbb{I}X_v\ F\mathbb{I}_v\ ]cntim[n/pJ</math></p>		
	<p>(7) <math>J_{\mathfrak{C}nensâ}\ X_e^{\circ}\ m\mathcal{K}_w\ D\mathfrak{b}\tilde{A}^{\circ}\ n\ tcn\mathcal{K}_{nsb}\ \mathfrak{C}cp^{\circ}pJ.</math></p>		
	<p>(8) <math>Yukv\ Ducn\ amüpJ.</math></p>		
	<p>(9) <math>ssJ\mathfrak{I}\tilde{A}^{\circ}\ Jgp\ Jn\ dqan\tilde{A}^{\circ}\ \backslash n\ \mathbb{I}pw\ amdn\ \backslash n\tilde{A}/pJ. tcn\mathcal{K}_n\ iv\ hñ\tilde{L}\tilde{A}^{\circ}\ \backslash^{\circ}n\ \backslash p</math>  <math>\quad th-n\ kx\ JmcyX\ \backslash\tilde{A}/pJ</math></p>		
	<p>(10) <math>tcn\mathcal{K}_n\ Bhiys, \mathfrak{D}pt\frac{1}{4}m^{\circ}\tilde{A}^{\circ}\ A_s\tilde{A}^{\circ}\  \ n\tilde{A}^{\circ}\ hñk\tilde{A}^{\circ}\ \backslash w\ Jgn^{\circ}m^{\circ}\tilde{A}^{\circ}\ tcn\mathcal{K}_{nhps}\ \mathfrak{D}</math>  <math>\quad \mathfrak{A}cn\ Jnte\ iv\ s\mathcal{N}\tilde{A}^{\circ}pJ.</math>  <u><math>s\_Uv/m^{\circ}\ amüp\ \mathbb{I}\ ccoX_n</math></u></p>		
	<p>(11) <math>ssJ\mathfrak{I}\tilde{A}^{\circ}\ Jgp\ Jn\ hr^{\circ}\ nbm\ in\ Yukv\ [cn/pJ.</math></p>		
	<p>(12) <math>J_{\mathfrak{C}nensâ}\ X_e^{\circ}\ m\mathcal{K}_w\ Xmgv^{\circ}\ n\ hñv/pJ.</math></p>		
	<p>(13) <math>tcn\mathcal{K}_{nsb}\ Hcp\ hüt^{\circ}\ iv\ \mathcal{N}cn^{\circ}p\ Jn\mathfrak{D}^{\circ}pJ</math></p>		
	<p>(14) <math>s\_Uv/m^{\circ}\ Hcp\ ssJ\ sJm-v\ (i^{\circ}n^{\circ}v\ amüpJ.</math></p>		
	<p>(15) <math>s\_Uv/m^{\circ}\ Jh\tilde{A}^{\circ}\ s\mathcal{N}bvX_v\ hñv/pJ.</math></p>		

	<p>(16) <math>tcm\mathcal{K}_{nbp}s\mathcal{D}aeZzmcw\text{ }hr^{-}nbm/pJ.</math></p> <p>(17) <math>d\mathcal{A}j\ddot{o}v\backslash\backslash^{\circ}m\mathcal{A}Xp\mathcal{D}^{\sim}v\text{ }hr^{-}nbm/pJ.</math></p> <p>(18) <math>tcm\mathcal{K}_{nsb}icnbmbn\text{ }Jn\mathcal{D}^{-}pJ.</math></p> <p><u><math>Jn\mathcal{I}^{\circ}\mathcal{D}p\mathcal{A}/cn\mathcal{N}cWw</math></u></p> <ul style="list-style-type: none"> <li><math>s\_Uv/m\mathcal{A}Wp\backslash min\backslash n\mathcal{D}/tbm\mathcal{K}_{n^{\sim}}v\text{ }hr^{-}nbm/pJ</math></li> <li><math>\mathcal{D}/tbm\mathcal{K}_{n^{\sim}}\text{ }km/\backslash\mathcal{S}\mathcal{A}hr^{-}nbm/n\text{ }F\mathcal{D}p^{-}ph/pJ</math></li> <li><math>ssJ\mathcal{I}\mathcal{A}hr^{-}nbm/pJ</math></li> </ul> <p><u><math>kw(\mathcal{K}sw</math></u></p> <p><math>\mathcal{G}hns\mathcal{D}\mathcal{G}t,m\mathcal{A}\backslash_{1/2}\mathcal{A}J-Xv\text{ }tcm\mathcal{K}_{nsb}h\ddot{nk}\mathcal{A}\ddot{O}\backslash^{-}n\backslash p\text{ }k\mathcal{I}mbn/p\mathcal{I}\mathcal{X}ns\backslash</math></p> <p><math>Jpdn^{\sim}pw\mathcal{A}\mathcal{X}ns\ddot{a}\mathcal{A}\mathcal{X}ns\ddot{a}\mathcal{D}t\pm i\mathcal{S}f\text{ }Jpdn^{\sim}pw\text{ }k\mathcal{I}mbn/p\mathcal{I}\text{ }cc\mathcal{X}nsb</math></p> <p><math>Jpdn^{\sim}psa\mathcal{A}namW^{\circ}v</math></p> <p><u><math>\mathcal{D}/kwImcw</math></u></p> <p><math>\backslash_{1/2}\mathcal{A}\mathcal{G}hns\mathcal{D}\text{ }tcm\mathcal{K}_{nsb}h\ddot{nk}\mathcal{A}\ddot{O}\backslash^{-}n\backslash p\text{ }k\mathcal{I}mbn/p\mathcal{I}\mathcal{X}ns\backslash\text{ }Jpdn^{\sim}v</math></p> <p><math>hniZambn\text{ }a\backslash\mathcal{E}nem/in.\text{ }Gu\mathcal{A}dnhv\text{ }(\backslash mh\mathcal{A}^{-}n\mathcal{I}am/p\mathcal{I}\mathcal{X}phgn\text{ }\backslash n\mathcal{S}fps\mathcal{D}</math></p> <p><math>\_ \hat{O}phns\ddot{a}\_p^2nap\ll v\text{ }Jpd/p\mathcal{I}hm\backslash pw\text{ }tcm\mathcal{K}_{hnap}\mathcal{I}v\mathcal{X}n\mathcal{I}v\mathcal{B}lw\mathcal{I}q\ll p\mathcal{I}hm\backslash pw</math></p>		
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	<i>\nS\Äip Sgnbpw.</i>		
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From

Dr. Sheila Jayaraj  
Head, Department of English  
RVS College of Arts & Science  
Sulur, Coimbatore

09<sup>th</sup> February 2012

Coimbatore

To

The Principal  
RVS College of Nursing  
Sulur, Coimbatore

Dear Madam,

This is to certify that I have edited and corrected the thesis given to me by Divya C., II M.Sc.  
Nursing. The corrected copy is handed over to the said student accordingly.

Yours sincerely,

*Sheila Jayaraj*  
9/2/12

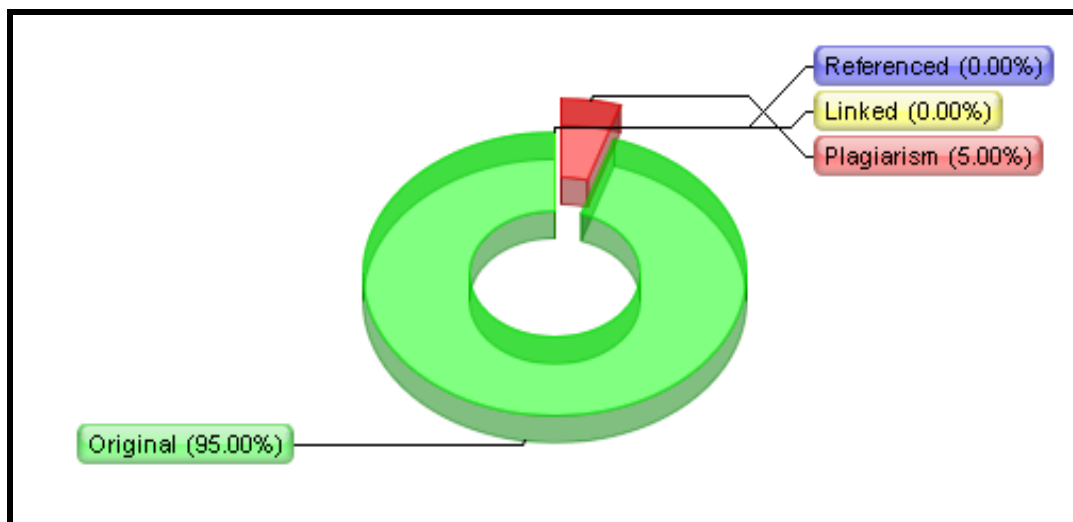
HOD of English

R.V.S. College of Arts & Science

Sulur P.O. COIMBATORE - 641 402

## APPENDIX-IX

### PLAGIARISM REPORT USING PLAGIARISM DETECTOR



#### Top 3 Plagiarized Sources:

Words#:	Source url:
268	<a href="http://www.nursingbuddy.com/2011/02/26/d...">http://www.nursingbuddy.com/2011/02/26/d...</a>
93	<a href="http://www.wisegEEK.com/what-is-chronic-...">http://www.wisegEEK.com/what-is-chronic-...</a>
137	<a href="http://www.unboundmedicine.com/medline/e...">http://www.unboundmedicine.com/medline/e...</a>

#### Report:

**5.00% of the content matched plagiarized sources and 95.00% of the content is original**